

# **Plant Archives**

Journal homepage: http://www.plantarchives.org DOI Url : https://doi.org/10.51470/PLANTARCHIVES.2024.v24.SP-GABELS.084

# PERSONNEL CORRELATES OF BIOMIX BENEFICIARY **AMONG TURMERIC GROWERS**

Sagar S. Bhople<sup>1\*</sup>, V.V. Tayde<sup>2</sup>, S.S. Walde<sup>1</sup> and P.A. Sakhare<sup>3</sup> <sup>1</sup>Department of Extension Education, College of Agriculture, Latur, Maharashtra, India <sup>2</sup>Department of Extension Education, College of Agriculture, Ambajogai, Maharashtra, India <sup>4</sup>Department of Extension Education, College of Agriculture Parbhani, VNMKV, Parbhani Maharashtra, India \*Corresponding author Email id: sagarbhople831@gmail.com

The present study was conducted in Hingoli, Aundha (nagnath) and Basmat tehsils of Hingoli district Marathwada region of Maharashtra state with a study sample of 120 biomix beneficiary. Profile Biomix beneficiaries it was observed that majority (64.17%) of the beneficiary were having medium farming experience with an education as secondary school level education (35.83%), followed (57.50%) of the beneficiary were having medium (cultivation practices) occupation, while (36.67%) of the beneficiary were possessing semi medium size of land holding. Further, it could be concluded that majority of the beneficiary were from medium level of annual income group (65.00%). followed (61.67%) of the beneficiary were from medium socio economic status, Further, it could be concluded that majority (54.17%) of the beneficiary were from medium social participation, followed (60.00%) of the beneficiary were in the medium sources of information, while (62.50%) of the beneficiary were in the ABSTRACT medium level of extension contact, most of the beneficiary (56.67%) and (58.33%) of the beneficiary were in medium risk orientation and scientific orientation, respectively while (60.83%) of the beneficiary were in the medium level of innovativeness and most of the beneficiary (58.33%) and (57.50%) were having medium level of knowledge and adoption respectively. Independent variable only farming experience is negative and significant relationship with perceived effectiveness, land holding, socio economic status discovered to be positive and significant relationship with perceived effectiveness of biomix among beneficiary of turmeric growers. Variables like education, occupation, annual income, social participation, source of information, extension contact, risk orientation, scientific orientation, innovativeness, knowledge and adoption had found positive and highly significant relationship with perceived effectiveness of biomix among beneficiary of turmeric growers. Keywords: Biomix, beneficiaries, turmeric growers, perceived effectiveness

### Introduction

Agriculture is considered as the backbone of Indian economy of our nation which act as a major source of livelihood, about 80 per cent of its population resides in villages and agriculture constitutes. The primary occupation of about 70 per cent of population of country. Biomix consortium is a product developed by Vasantrao Naik Marathwada Krishi Vidyapeeth (VNMKV) Parbhani, Maharashtra, India. The consortium is a blend of beneficial microorganisms that can be used as a soil amendment to improve soil fertility, plant growth, and yield. Taking into consideration the area, production and productivity of crops in Marathwada, 'Biomix' developed by Vasantrao Naik Marathwada Agricultural University, Parbhani working department of Plant Pathology, 'Biomix' is a mixture of various useful biological consortium. Bio consortium, improves the soil properties, maintain the soil fertility and harmless. It is a known fact that the bioagents are playing important role in plant disease management, pest management and boosting the plant growth. Dr. V. T. Jadhav, Professor of department of plant pathology, College of Agriculture Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani introduced bio control in the Marathwada region and developed an experimental

product for management of citrus. Based on the performance, literature and problems in turmeric, an improved biomix was formulated by adding some bio fungicides, bio pesticides and growth promoting bio agents. This product solved the all major problems in turmeric. Bio consortium can play a vital role as a low cost input for sustainable agriculture for small and marginal farmers who cannot afford the expense of chemical fertilizers. Farmers response about biomix they said that biomix has not only solved the problems of soft rot and white grub in turmeric but also improved the quality and yield of turmeric. Some farmers told that due to use of biomix, turmeric has fetched the highest market value. The biomix is also used in different crops like ginger, tomato, mango, groundnut, citrus, pomegranate, watermelon, papaya, different vegetable and legume crops like tur and soybean. The results of the use of biomix are very promising and it is found effective against different diseases, pests and promoted the growth of crops. This product has crossed the borders of Maharashtra and it is also used in Gujarat and Karnataka. Overall, the biomix consortium produced by VNMKV Parbhani is an innovative and eco-friendly approach to enhance agriculture productivity and sustainability.

## **Materials and Methods**

The present study was conducted in Hingoli District of Marathwada region in Maharashtra State The district has five talukas namely Hingoli, Kalamnuri, Sengaon, Aundha (Nagnath) and Basmat with 680 Villages. From Hingoli district, three talukas was selected purposively for the present study on the basis of biomix beneficiary. Hingoli, Aundha (Nagnath), Basmat were selected purposively on the basis of biomix beneficiary. From each of the selected talukas 4 villages was selected purposively. A total 12 villages were selected for the present study. From each village, selected 10 beneficiary was selected purposively, who are the biomix beneficiaries so, from each taluka total 40 beneficiary was selected. Hence, a total of 120 beneficiary was selected for the present study. The ex-post-facto research design used for present study. Collected the data personally from Biomix beneficiaries by using the pre tested interview schedules at their home or farms. The collected data was organized, tabulated and analyzed with the help of statistical tools like frequency, mean, percentage, standard deviation, correlation of coefficient (r), multiple regression.

#### **Results and Discussion**

It was observed from the Table 1 that, revealed that majority (64.17%) of beneficiary had medium level of farming experience, 35.83 per cent of the beneficiary were educated up to secondary school level, majority (57.50%) of farmers were engaged in cultivation or farming, (36.67%) of the beneficiary were semi-medium land holders, majority (65.00%) of the beneficiary had medium level of annual income, 61.67 per cent of the beneficiary had medium level of socio economic status, 54.17 per cent of the biomix beneficiary have medium level of social participation, majority (60.00%) of the beneficiary were using medium level of sources of information, majority (62.50%) of the biomix beneficiary had medium level of extension contact, majority (56.67%) of the biomix beneficiary had medium level of risk orientation, more than half of the beneficiary (58.33%) had medium level of scientific orientation, more than half (60.83%) of the beneficiary biomix had medium level of innovativeness, 58.33 per cent of farmers belongs to medium level of knowledge, majority (57.50%) of biomix beneficiary had medium extent of adoption.

Table 1 : Distribution of the Biomix beneficiaries according to their Profile

Sr.No	Category	Biomix beneficiary (N=120)	
		Frequency	Percentage
A. Fa	rming Experience		
1	Low (Up to 11)	21	17.50
2	Medium (12 to 21)	77	64.17
3	High (22 and above)	22	18.33
B. Ed	ucation		
1	Illiterate	14	11.67
2	Primary school level (1 <sup>st</sup> to 4 <sup>th</sup> std)	25	20.83
3	Secondary school level (5 <sup>st</sup> to 10 <sup>th</sup> std)	43	35.83
4	Secondary school level (11 <sup>st</sup> to 12 <sup>th</sup> std)	21	17.50
5	College level (above 12 <sup>th</sup> std)	17	14.17
C. Oc	cupation		
1	Labour (1)	19	15.83

2	Cast occupation (2)	7	5.83
3	Business (3)	6	5.00
4	Independent profession (4)	8	6.67
5	Cultivation (5)	<u> </u>	57.50
6	Service (6)	11	9.17
	nd holding	11	9.17
<b>D. La</b>	Marginal farmers (Up to 1.00 ha)	25	20.83
2	Small farmers (1.01 to 2.00 ha)	23	20.83
3	Semi- medium farmers (2.01 to 4.00 ha)	44	36.67
4	Medium farmers (4.01 to 10.00)	21	17.50
5	Big farmers (10.01 ha and above)	3	2.50
-		5	2.30
	ual income	22	10.17
1	Low (Up to .1,35,293)	23	19.17
2 3	Medium (between . 1,35.294 to 4,74,562)	78	65.00
-	High (4,74,563 and above)	19	15.83
-	economic status	24	20.00
1	Low (Up to 46.11)	24	20.00
2	Medium (46.12 to 74.41)	74	61.67
3	High (74.42 and above)	22	18.33
	cial participation	21	25.02
1	Low (Up to 26)	31	25.83
2	Medium (27 to 38)	65	54.17
3	High (39 and above)	24	20.00
	urces of information	25	20.02
1	Low (Up to 35)	25	20.83
2	Medium (36 to 48)	72	60.00
3	High (49 and above)	23	19.17
	ension contacts	22	10.22
1	Low (Up to 35)	22	18.33
2	Medium (36 to 46)	75	62.50
3	High (47 and above)	23	19.17
	k orientation	24	20.00
1	Low (Up to 19)	24	20.00
2	Medium (20 to 28)	68	56.67
3	High (29 and above)	28	23.33
	entific orientation	21	15.50
1	Low (Up to 18)	21	17.50
2	Medium (19 to 29)	70	58.33
3	High (30 and above)	29	24.17
-	novativeness	20	14.47
1	Low (Up to 19)	20	16.67
2	Medium (20 to 27)	73	60.83
3	High (28 and above)	27	22.50
	nowledge		17 50
1	Low (Up to 15)	21	17.50
2	Medium (16 to 20)	70	58.33
3	High (21 and above)	29	24.17
-	option		
1	Low (Up to 17)	21	17.50
2	Medium (18 to 25)	69	57.50
3	High (26 and above)	30	25.00

 Table 2 : Relationship between independent variables and the perceived effectiveness of biomix among beneficiary of turmeric growers.

SL. No.	Independent variables	Coefficient of correlation (c)
1	Farming experience	-0.185
2	Education	0.335**
3	Occupation	0.444**
4	Land holding	0.238*
5	Annual income	0.266**
6	Socio Economic Status	0.253*
7	Social participation	0.288**
8	Sources of information	0.335**
9	Extension contacts	0.343**
10	Risk orientation	0.328**
11	Scientific orientation	0.376**
12	Innovativeness	0.359**
13	Knowledge	0.521**
14	Adoption	0.517**

\*\* Significant at 0.01 per cent level.

\* Significant at 0.05 per cent level.

It was seen from table No. 2 that, out of fourteen independent variables only farming experience is negatively significant relationship with perceived effectiveness while, Land holding and Socio economic status are positively significant relationship with perceived effectiveness and other independent variables education, occupation, annual income, social participation, source of information, extension contact, risk orientation, scientific orientation, innovativeness, knowledge and adoption had positive and highly significant relationship with perceived effectiveness.

#### Conclusion

As regard the profile of biomix beneficiary of turmeric growers, it was observed that majority 64.17 per cent of beneficiary had medium farming experience, secondary level of education 35.83 per cent, occupation (cultivation) 57.50 per cent, semimedium land holding 36.67 per cent, medium annual income 65.00 per cent, medium socio economic status 61.67 per cent, medium social participation 54.17 per cent, medium source of information 60.00 per cent, medium level of extension contact 62.50 per cent, medium level of risk orientation 56.67 per cent, medium level of scientific orientation 58.33 per cent, medium level of innovativeness 60.83 per cent, medium level of knowledge 58.33 per cent and medium level of adoption 57.50 per cent. It can be concluded from the above table that majority 44.17 per cent of the biomix beneficiary had high level of perceived effectiveness of biomix among beneficiary of turmeric growers the rational analysis of selected characteristics showed that farming experience, education, occupation, land holding, annual income, socio economic status, social participation, sources of information, extension contact, risk orientation, scientific orientation, innovativeness, knowledge, adoption influenced the perceived effectiveness of biomix among beneficiary of turmeric growers.

#### References

- Chavan, N.N. (2016). Utility Perception of broad bed furrow technology by the soybean growers (Master's thesis).Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbani. Retrived from - http://krishikosh.egrant h.ac.in/handle /1 /5810057104. Accessed on 11 feb 2023.
- Rao, N.S. (2016). A study on knowledge and adoption of turmeric farmers in Guntur district of Andhra Pradesh (Master's thesis). Acharya N.G. Ranga Agricultural University, Guntur, Andhra Pradesh, India. Retrived from - https://krishikosh. egranth.ac.in/handle/1/5810044729. Accessed on 28 Feb 2023.
- Spandana, J. (2016). Perceived Effectiveness of Agricultural programme telecast on doordarshan (Master's thesis). Vasantrao Naik Krishi Vidyapeeth, Parbhani (M.S) Retrived from- https://krishikosh. egranth.ac .in/handle/1 /5810054316. Accessed on 12 Aug 2022..
- Patil, S.U. (2017). Effectiveness of Agricultural programme of DD Kisan channel as perceived by farmers (Master's thesis).Vasantrao Naik Krishi Vidyapeeth, Parbhani. Retrived from-https://krishikosh.egranth.ac.in /handle/1/ 581 0033 619. Accessed on 10 Sept 2022.
- Lawankar, M. (2019). Effectiveness of Krishidarshan programme of Nagpur Doordarshan as perceived by the farmers (Master's thesis) Dr. Panjabrao Deshmukh Krishi Vidyapeeth Akola, (M.S) Retrived from - https://krishi kosh. egranth.ac.in/handle/1/58101692