



# Knowledge of Women towards Improved Rice Cultivation Practices in Bongmol Village of Kangpokpi District, Manipur, India

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## Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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## ABSTRACT

The study is undertaken in Bongmol village which comes under Champhai Block of Kangpokpi district, Manipur. A total number of 120 respondents were selected purposively for the study. Descriptive research design was harnessed for the present study and the primary data were amassed using pre-structured interview schedule. The findings of study shows that majority (52.50%) of the respondents have medium knowledge level category towards improved Rice cultivation practices. Age, education, occupation, marital status, farming experience, annual income, mass media exposure, innovativeness, risk orientation and economic motivation are positively correlated with knowledge of women towards improved rice cultivation practices. High cost of fertilizers and lack of funding from government were the major constraints faced by the respondents.

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## 1. INTRODUCTION

Agriculture plays a vital role in the Indian economy. Over 70.00 % of the rural households depend on agriculture. Indian agriculture sector accounts for 18 per cent of India's Gross Domestic Product (GDP) and provides employment to 50% of the countries workforce, as reported by the Food and Agriculture (FAO). "Agricultural sector provides raw material to industrial sectors and supply food grains all over the country. India has diversified agro-climatic zones having the potential of growing varieties of crops and optimizing the production to enhance the farm income [1,2]. Based on the annual report of Department of Agriculture, Cooperation & Farmers Welfare Government of India, 54.6 per cent of the total population in India is engaged with agriculture and allied activities by contributing 17.4% Gross Value added for the year 2016-17. Wheat, rice, jowar, millets and sorghum are the major cultivated crops in the country. Among the major cultivated crops, rice is an important staple food crop and holds second position in terms of production which has 42.9 million hectares cultivated area that accounts for about 27.1 per cent of the total rice growing area all over the world" [3]. Rice is grown in the eastern and western shoreline areas, drainage basin of Ganga river and Northeast India. Manipur is one of the North eastern state in India and 90% of gross cropped area (GCA) of the state is under paddy cultivation. When many states in India are gradually moving away from the traditional agriculture-based to industry or service-oriented economy, Manipur continue to depend on agriculture sector, especially the rice crop [4,5]. Out of all the crops cultivated, rice cultivation dominates as the most cultivated crop of Manipur Singha and Mishra [6] Bongmol village of Kangpokpi district which I have done my research on is surrounded by rivers on all sides making it pleasant to live and resourceful for the community in their livelihood. It is ascertained that majority of the people living are engaged in agriculture practices especially rice cultivation. In spite of the fact that the people have the zeal to grow rice crop, the lack of knowledge and awareness about good agriculture practices hinder them in producing good quality and high yield.

The research findings is anticipated to let the farmer become aware of the improved rice

cultivation practices and bring development in agriculture sector as a whole

## 2. METHODOLOGY

Descriptive research design was used. The study was on the knowledge of women towards improved rice cultivation practices in Bongmol village of Kangpokpi district, Manipur, conducted in the session 2022-2023. A total number of 120 respondents were purposively taken from Bongmol Village which comes under Champhai Block and based on the objectives of the study, an interview schedule was prepared. The information were amassed from the respondents using pre-structured interview scheduled and the results were obtained using appropriate statistical analysis.

### 2.1 Objective of the Study

- To study the socio- economic profile of the respondents
- To determine the knowledge of the respondents towards improved Rice cultivation practices.

### 2.2 Methods of Data Collection

The primary data was obtained by collecting personal interview with the help of pre-tested structured schedule developed aligned with the objectives and the secondary data were derived from books, journals, research paper etc. The collected data from the respondents were classified scored, tabulated and analysed to calculate frequency, percentage, and correlation.

## 3. RESULTS AND DISCUSSION

Table 1 shows that majority (45.83%) of the respondents are of middle age group, Similar findings was also reported by Poshia et al. [7], 22.50 per cent of the respondents were educated up-to Primary School. It was found that 43.33 per cent of the respondents were engaged in agriculture + labour for their livelihood and majority (68.33%) of the respondents are married. It shows that majority (62.50%) of the respondents have hut housing pattern Similar result was also reported by Gupta, et. al. [8] and majority (85.00%) of the respondents had 1-2 acres of land. It was found that majority (35.83%) of the respondents have >15 years of farming experience with (48.34%) of the respondents income between 50,001 to 1,00,00 rupees. It shows that majority (63.33%) of the respondents

have medium level of media exposure. It was found that majority (46.67%) of the respondents have medium level of innovativeness. Similar result was also reported by Mamathalakshmi et al. [9]. It shows that majority (53.33%) of the respondents have medium level of risk orientation and majority (55.00%) of the respondents have medium level of economic motivation.

The data presented in Table 3 shows that majority 52.50% of the respondents had medium level of knowledge level about improved rice cultivation practices, 19.17% of the respondents were observed in the high knowledge level category and remaining 22.50 per cent respondents formed low knowledge level category. The similar results were also observed by Prakash [10].

**Table 1. Socio economic profile of the respondents**

Sl. No.	Category	Frequency	Percentage
<b>1.</b>	<b>Age</b>		
	Young (Below 35years)	44	36.67
	Middle (36-55 years)	55	45.83
	Old (Above 56 years)	21	17.50
	Total	120	100.00
<b>2.</b>	<b>Education</b>		
	Illiterate	25	20.83
	Can Read and Write	22	18.33
	Primary School	27	22.50
	Junior High School	19	15.83
	Intermediate	14	10.83
	Graduate and Above	15	11.67
	Total	120	100.00
<b>3.</b>	<b>Occupation</b>		
	Agriculture Only	42	35.00
	Agriculture+ Labour	52	43.33
	Agriculture +Business	16	13.33
	Agriculture +Service	10	08.33
	Total	120	100.00
<b>4.</b>	<b>Marital Status</b>		
	Married	82	68.33
	Unmarried	24	20.00
	Widow	14	11.67
	Total	120	100.00
<b>5.</b>	<b>Housing Pattern</b>		
	Hut	75	62.50
	Semi-Cemented	31	25.83
	Cemented	14	11.67
	Total	120	100.00
<b>6.</b>	<b>Land Holding</b>		
	Up to 1 acre	102	85.00
	1-2 acre	9	07.50
	Above 2 acres	9	07.50
	Total	120	100.00
<b>7.</b>	<b>Farming Experience</b>		
	Up to 5 years	21	17.50
	6-10 years	19	15.83
	11-15 years	37	30.83
	Above 15 years	43	35.83
	Total	120	100.00

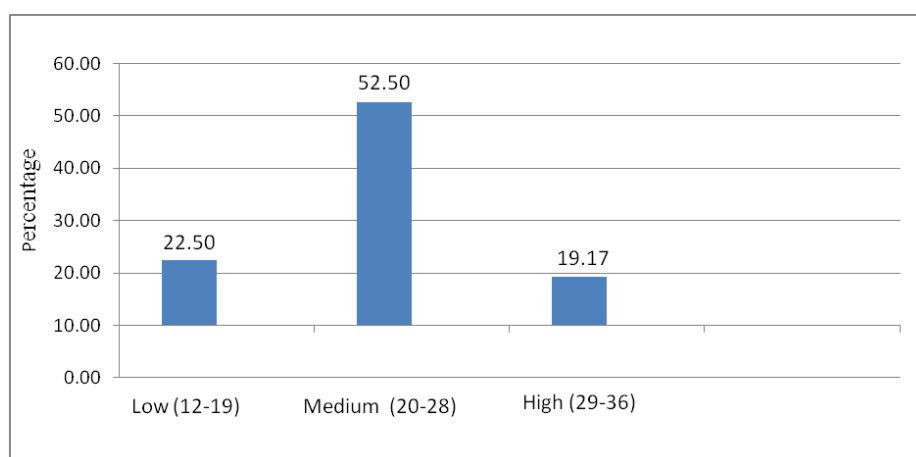
Sl. No.	Category	Frequency	Percentage
<b>8.</b>	<b>Annual Income</b>		
	Up to Rs.50,000	26	21.67
	Rs.50,001 to Rs.1,00,000	58	48.33
	Above Rs.1,00,000	36	20.00
	Total	120	100.00
<b>9.</b>	<b>Mass Media Exposure</b>		
	Low (5-7)	12	10.00
	Medium (8-10)	76	63.33
	High (11-13)	32	26.67
	Total	120	100.00
<b>10.</b>	<b>Innovativeness</b>		
	Low (16-18)	41	34.17
	Medium (19-23)	56	46.67
	High (24-27)	23	19.16
	Total	120	100.00
<b>11.</b>	<b>Risk Orientation</b>		
	Low (8-10)	34	28.33
	Medium (11-13)	64	53.33
	High (14-16)	22	18.33
	Total	120	100.00
<b>12.</b>	<b>Economic Motivation</b>		
	Low (10-12)	12	10.00
	Medium (13-15)	66	55.00
	High (16-18)	42	35.00
	Total	120	100.00

**Table 2. Knowledge of respondents towards Improved Rice cultivation practices**

Sl. no.	Statements	Evaluation		
		Fully known F (%)	Partially known F (%)	Not known F (%)
1	Field preparation	50 (41.67)	40 (33.33)	30 (25.00)
2	Suitable soil	1 (0.83)	33 (27.50)	86 (71.67)
3	Sowing time	111 (92.50)	8 (6.67)	1 (0.83)
4	Seed rate	87 (72.50)	22 (18.33)	11 (09.17)
5	Spacing	22 (18.33)	28 (23.33)	70 (58.33)
6	Transplanting time	21 (17.50)	31 (25.83)	68 (56.67)
7	Manure used	14 (11.67)	47 (39.17)	59 (49.17)
8	Weeding stages	70 (58.33)	28 (23.33)	22 (18.33)
9	Disease control used	45 (37.50)	44 (36.67)	31 (25.83)
10	Weedicides for weed control	72 (60.00)	39 (32.50)	9 (7.50)
11	Harvesting	111 (92.50)	9 (7.50)	0 (0.00)
12	Post harvesting	71 (59.17)	30 (25.00)	19 (15.83)

**Table 3. Over all distribution of respondents based on the knowledge level towards improved Rice cultivation practices**

Sl. No.	Knowledge	Frequency	Percentage
1.	Low (12-19)	27	22.50
2.	Medium (20-28)	63	52.50
3.	High (29-36)	30	19.17
<b>Total</b>		<b>120</b>	<b>100.00</b>



**Fig. 1. Knowledge level of respondents towards improved rice cultivation practices**

**Table 4. Relationship between selected independent variable with knowledge level of respondents towards improved Rice cultivation practices**

Sl. No.	Variables	Correlation Coefficient ('r' Value)
1.	Age	0.805657**
2.	Education	0.94975**
3.	Occupation	0.775003**
4.	Marital Status	0.2919*
5.	Housing Pattern	-0.15882(NS)
6.	Farming Experience	0.6565**
7.	Annual Income	0.999268**
8.	Mass Media Exposure	0.3681*
9.	Innovativeness	0.884487**
10.	Risk Orientation	0.981964**
11.	Economic Motivation	0.778525**

\*\* = Significant at 0.01 level of probability

\* = Significant at 0.05 level of probability

NS = Non Significant

The above Table 4 shows that out of eleven independent variables, ten of which i.e. age, education occupation, marital status, farming experience, annual income, mass media exposure, innovativeness, risk orientation and economic motivation are positively and significantly correlated with knowledge of women towards improved rice cultivation practices while one of the independent variable i.e. housing pattern of the respondents was availed negatively correlated with knowledge of women towards improved rice cultivation practices.

#### 4. CONCLUSION

It is concluded that majority of the respondents were middle age group, and have attained up-to Primary School. The respondents were mainly engaged in agriculture + labour for their livelihood, majority of the respondents resides in

hut housing pattern with land holding of 1 to 2 acres. Most of the respondents have more than 15 years of farming experience and annual income of 50,001 to 1 lakh. It was found that majority of the respondents have medium level of mass media exposure, innovativeness, risk orientation and economic motivation. The factors influencing the knowledge of the respondents towards improved rice cultivation were age, education, land holding, farming experience, annual income, mass media exposure, innovativeness, risk orientation and economic motivation which were directly co-related with the knowledge towards improved rice cultivation practices. Assistance of Extension agent or person and further support from Government for purchasing the essential requirement such as fertilizers and machineries is necessary for enhancing rice cultivation practices.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

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