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# KNOWLEDGE AND ADOPTION OF RECOMMENDED PACKAGE OF PRACTICES OF PADDY CROP THROUGH EXTENSION CONTACTS BY TRIBAL FARMERS

#### S.R. Dubolia\*

\*KVK Surguja, Ajirma, Ambikapur (CG)

**Abstract:** India is a country of villages where 72.22% population resides in villages and approximately by half of the gross national income comes from agriculture and agro based industries. Agriculture alone contributes 22% GDP and provides livelihood to almost two third of the population. India is the second largest producer of rice in the world and ranks first in area but 35<sup>th</sup> in productivity (The Hindu Survey of Indian Agriculture 2006:39). The socio-economic status of tribal farmers can be increases by raising their rice production. Therefore, there is a need to plan and take up massive extension activities with dedicated efforts for their upliftment. The present study is an effort in this direction by developing suitable, sustainable and strong extension contacts for the tribal farmers. The study was undertaken in 10 villages in surguja district.

#### Introduction:

"Rice is life" as it is said is true because rice is stable diet of more than one third of world's population. Production of rice has increased from 30.4 million tons in 1966 to a record high of 93.3 million tons in 2001-02. This steady increase in rice production over the years transformed the country into being self sufficient in food grains. The production of food grains has increased up to 206.39 million tones, where the contribution of rice production has been 87.80 million tones. Breakthrough in agriculture has made possible to boost the per hectare yield of rice from 1.76 tons to 2.15 tones. This variation of per hectare yield is because of number of technical, geographical and cultural factors. India has broadly three categories of farmers according to their culture and pattern of life. These are General farmers, Scheduled casts and Scheduled tribes. The agricultural practices differ from category to category however tribal of India are traditionalist, hardliner and shy in nature. Since they are still not in the main stream, the recent agricultural development has not reached to them resulting considerably low agricultural production among the tribal community. The state of Chhattisgarh has the geographical area of 135194 sq. kms. With highest concentration of tribal population. Rice is the main crop in this tribal dominated state which is also called as "rice bowl". The socio-economic status of tribal farmers can be increases by raising their rice production. Therefore, there is a need to plan and take up massive extension activities with dedicated efforts for their upliftment. The present study is an effort in this direction by developing suitable, sustainable and strong extension contacts for the tribal farmers. The study was carried out with the following objectives in tribal pockets of Surguja in Northern hill region of Chhattisgarh:

To find out the extent of mass media exposure among the respondents and their communication behavior.



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To find out the extent of knowledge and adoption about the paddy cultivation among the tribal respondents based on extension contact categories.

### Methodology:

The study was undertaken in 10 villages namely Bhagwanpur, Mendrakhurd, Bakirma, Khaliba, Barnijharia, Kanakpur, Pandunagar, Latori, Basdei and Keshavnagar of Ambikapur and Surajpur blocks in district surguja which were selected randomly. Selected villages were majorly dominated by the tribal population. These tribal communities of villages are Cherwa, Pando, Gond, and Oraon. In view of objectives of the study and area were the investigation where carried out ex-post facto research design was followed for the purpose. The tribal farmers of the area were already exposed with scientific knowledge of agricultural practices through different media and other tribal development programmes with special reference to HYV of paddy cultivation. Two categories viz. small and medium tribal farmers were selected for the purpose with assumption that the medium category of tribal farmers have less and small category of farmers have more constraints in acceptance and adoption of improved technology.

Stratified random sampling techniques was used for the selection of respondents. Therefore, village wise lists of farmers of small and medium categories were prepared separately. 10 tribal farmers of each categories of each village were selected randomly. Thus, from 10 selected villages of 2C.D. blocks, the total respondents were 100 small and 100 medium categories of tribal farmers making the total sample of 200 respondents. The information was collected by personal interview method with the help of specially structured schedule.

#### **Results and Discussion**

The table-1 reveals that there were no respondent who high level 0f extension contact whereas majority (i.e.80.5 per cent) of 161 respondents had low level of extension contact and remaining respondents had medium level of extension contact. The similar trends were also found with small and medium categories of respondents separately. This shows that the tribal farmers had been exposed a little through the most powerful methods and approaches sources of information. Whatever the tribal farmers have sources of information through the extension methods and approaches are available with tribals are only the localite sources only. It is reported that negligiable efforts have been made to create awareness among tribal farmers through various cosmopolite methods and approaches of extension.

Table: 1.Distribution of respondents according to their extension contact

SN	Extension contact variables	Frequency of respondents						
		Small (n=100)	Medium (n=100)	Overall (n=100)				
1	Low (12 -22)	78(39.0)*	83(41.5)	161(80.5)				
2	Medium (23-31)	22(11.0)	17(8.5)	39(19.5)				
3	High(32 and above)	-	-	-				

<sup>\*</sup>the values given in brackets are in percentage



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The table-2 reveals that all the selected respondents had low status of mass media exposure. It was practically observed in the field during the collection of data that only few 5 to 10 respondents had transistor set further there were no respondents who had the TV set in their life. Further they are illiterate therefore there is no utilization of print media. Their villages are not electrified therefore utilization of radio set as source of information is also not used. The radio set is being used by tribal farmers for their entertainments by sharing the cost of battery of transistor set.

Table :2. Distribution of respondents according to their mass media exposure.

SN	Mass media exposure	Frequency of respondents						
		Small (n=100)	Medium (n=100)	Overall (n=100)				
1	Low(12-22)	100(50.0)*	100(50.0)	200(100.0)				
2	Medium(23-31)	00(00.0)	00(00.0)	00(00.0)				
3	High(32 and above)	00(00.0)	00(00.0)	00(00.0)				

<sup>\*</sup>the values given in brackets are in percentage

The table 3 reveals that majority 181 (990.5 per cent) respondents had low state of communication behavior followed by 19 (09.5) respondents had medium state of communication behavior. In case of small category of farmers, 89 (44.5 per cent) respondents had low and 11 (5.5 per cent) respondents had medium state of communication behavior. Whatsoever information they get are only the localite sources and or the extension agent of voluntary organizations.

Table: 3. Distribution of respondents according to their state of communication behaviour.

SN	State of communication	Frequency of respondents						
	behaviour	Small (n=100)	Medium (n=100)	Overall (n=100)				
1	Low(12-22)	89(44.5)*	92(46.0)	181(90.5)				
2	Medium(23-31)	11(05.5)	8(04.0)	19(09.5)				
3	High(32 and above)	-	-	-				

<sup>\*</sup>the values given in brackets are in percentage

The table-4 revels that in case of respondents of small category of farmers, the significant difference was found among the respondents who had low extension contact as compared to those who had medium extension contact on their knowledge about chemical fertilizer and storage/cropping pattern as well as overall HYV paddy cultivation. Further, the respondents of low extension contact had no significant differences in their knowledge about other three practices of HYV paddy cultivation with the respondents who had medium extension contact. The level of adoption were also found at par among the respondents who had low and medium extension contact.

In case of respondents of medium category of farmers, the significant difference was found among those who had low extension contact as compared with those who had medium extension contact in their knowledge about storage/cropping pattern and in their adoption of production technology .No differences were found significant among the respondents, those who had low extension contact as



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compared to medium extension contact, in their knowledge and adoption of other practices of HYV paddy cultivation.

In case of overall respondents of both the category of farmers, no significant differences were found among those who had low extension contact as compared with medium and high, in their knowledge of almost all the practices except production technology as well as over knowledge of HYV paddy cultivation which were significantly different with each other. The difference in adoption of improved production technology was found significant between the respondents, who had low and medium extension contact.

This may be inferred here that the farmers, who had medium extension contact, had the high level of knowledge and adoption as compared to those who had low extension contact. As far as the mass media was concerned, the tribal farmers did not have excess to the mass media except some tribal due to various constraints.

#### **Conclusion:**

In view of findings of the study which clearly highlight that the knowledge and adoption of HYV paddy cultivation among the tribal farmers were very poor as per recommended practices. It is most unfortunate that the tribal farmers, do not get the extension support at all. The no adoption or late adoption among the tribal farmers is one of the main reason of week extension network. Further, more the tribal farmers are unable to use the electronic media to get the recent knowledge; because of costly equipment and erratic or no electric supply. Therefore, the tribal farmers totally dependent on the local level of extension support. Therefore, extension network should be strengthened and ensured for massive extension programmes.

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Table: 4. Difference in state of knowledge and adoption among the respondents according to their different extension contact categories

Economic categories	Production technology		Chemical fertilizers		Plant protection measures		Improved implements / irrigation		Storage / cropping pattern		overall	
	Knowledge	Adoption	Knowledge	Adoption	Knowledge	Adoption	Knowledge	Adoption	Knowledge	Adoption	Knowledge	Adoption
Small farmers												
Low vs Medium	1.23	1.43	1.98*	0.72	0.98	0.88	0.93	0.94	1.97*	1.04	1.94*	1.0
Low vs High	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Medium vs High	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Medium farmers												
Low vs Medium	1.57	1.96*	1.07	0.93	1.22	0.79	1.04	1.03	1.96*	1.07	1.22	1.09
Low vs High	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Medium vs High	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Overall farmers												
Low vs Medium	1.22	1.93*	1.09	1.03	1.45	1.07	1.54	1.34	2.01*	1.22*	1.92*	1.07
Low vs High	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Medium vs High	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Significant at 5 percent level\*