

Original Research Article

The Communication Traits of the Tribal Millet Farmers Affecting Their Level of Awareness and Utilisation of the Recommended Cultivation Practices of Small Millets in the Bastar Plateau Zone of India

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ABSTRACT

This study was focused to investigate the communicational traits of the tribal millet farmers which are affecting their level of awareness and utilisation of the recommended cultivation practices of small millets in the Bastar Plateau Zone of Chhattisgarh State of India. Data were collected through the personal interview, with the help of interview schedule prepared in Hindi. The communication traits were studied and the results revealed that the respondents were having medium cosmo politeness with less than one third of them visiting out of their own social system. Friends and neighbour were the most utilized personal localite sources, Rural Agriculture Extension Officer (RAEO) and input dealers were personal cosmopolite sources and radio was the mostly utilized impersonal cosmopolite or mass media source. Scientists, demonstrations, kisan mela and trainings were the most credible sources of information. Participation of respondents in extension activities was very poor, since nearly half of them were never involved, while less than one third of them were having low involvement in extension activities.

Keywords

Tribal millet, utilization, bastar plateau, traits

Introduction

Small millets are the traditional crops, agronomically more adapted to impoverished soils. These crops are grown in diverse soils, varying rainfall regimes and in areas widely differing in thermo and photoperiods. The resilience exhibited by these crops is helpful in adjusting themselves to different kinds of ecological niches. All these have made them quite indispensable to rainfed, tribal and hill agriculture where crop substitution is difficult. That is why it is important to enhance production and productivity of these crops to ensure food and nutritional security not only to people living in harsh

and difficult terrains, but also in other areas. Chhattisgarh has 5.88 million hectares of cultivable land. Rice is the principal crop of the region. In 2006, Chhattisgarh occupied 248.5 thousand hectares of land (which is 21.18 % of India's 1173.5 thousand ha) under small millets with total production of 52.1 thousand tons (which is only 10.22 % of total national production of 509.8 thousand tons) and yield of 210 kg ha⁻¹ against national productivity of 434 kg ha⁻¹ (www.dacnet.nic.in).

In Bastar Plateau Zone, the area under small millets was 28.41 thousand hectares, which

was 39.73 per cent of Chhattisgarh State area of 71.50 thousand hectares. While, the total production was 7.95 thousand tons which was 37.06 per cent of Chhattisgarh State production of small millets of 21.45 thousand tons (Anonymous, 2009).

A state cannot progress further till our farmers and agricultural labour improve their living conditions. There is need to provide the benefits of advancements in agricultural sciences to the farmers. There is need to start agro-based village specific activities as the farming alone could not raise the living standard of farmers. Chhattisgarh is very aptly called the *rice bowl*. However, paddy alone would not bring prosperity and food security. It is high time to promote and secure other crops, the most prominent ones being the small millets. In earlier times millets were grown on large areas especially in the tribal belts. But now they are very rapidly being replaced by other crops or being pushed to less remunerative soils, in lack of motivation and market support.

The present study was carried out in Bastar Plateau Zone of Chhattisgarh State with the following objectives:

To study the Socio-economic traits of the small millets growers in study area,

To study the communicational traits of the respondents which are affecting the level of awareness and utilisation of the recommended cultivation practices of small millets.

Materials and Methods

The study was conducted in Bastar Plateau Zone of Chhattisgarh state during the year 2008-09. This agro-climatic zone was purposively selected because the maximum

area under small millets exists in this agro-climatic zone. Out of the total six small millet crops, only three important crops viz., Little millet, Kodo millet and Finger millet were selected purposively for this study as they were having the maximum area under coverage as compared to other millets.

Out of the total 25 blocks of Bastar Plateau Zone comprising of Bastar, Dantewada, Narayanpur and Bijapur districts, only one third of the total blocks i.e., 9 blocks were selected purposively on the basis of maximum area under selected small millets for the purpose of the study.

Out of the selected 9 blocks, a total of 18 villages (2 villages from each block - $9 \times 2 = 18$) were selected purposively on the basis of area under small millets for collection of data.

From the total small millet growers of the each selected village, 15 farmers (who were growing at least two crops out of the selected three small millet crops) were selected randomly as respondents for the study. Thus, in this way, a total of 270 farmers ($18 \times 15 = 270$) were considered as respondents for collection of data.

Data processing and statistical framework used for analysis of data

The raw data obtained through interview schedule were entered in the worksheet and tally sheet. They were processed, tabulated, classified, analysed and given statistical treatments.

Results and Discussion

Communicational Traits

Brief profile of the respondents on the basis of communicational traits is presented here.

Under the category of communicational traits four variable namely cosmopolitaness, sources of information, contact with extension personnel and participation in extension activities were taken.

Cosmopolitaness

Cosmopolitaness refers to the outside contact of individual from his social system. It is supposed to be one of the important factors, which is responsible for providing exposure of farmers towards innovations. The results compiled in Table 1 and depicted in Fig. 1 reveals that majority of the respondents (45.93 %) were having medium cosmopolitaness, while 43.70 per cent and 10.37 per cent of the respondents were having low and high cosmopolitaness. Thus, it may be concluded that nearly 90 per cent of the respondents were having low to medium cosmopolitaness.

More than half of the respondents were having monthly or quarterly frequency of visits (Fig.2) while annual, fortnightly, weekly and daily visits were reported by 20, 15, 9 and 1 per cent of the respondents, respectively.

Sources of Information

All the sources utilized by the respondents for gathering information on agricultural aspects are grouped under three heads viz., personal localite, personal cosmopolite and Interpersonal cosmopolite sources (Table 2). Under the personal localite sources a total of five sources were used out of which friend the most popular one ranked as first, utilized by 91.48 per cent of the respondents. Neighbour (77.04 %), relative (46.67 %), progressive farmers (23.70 %) and panch / sarpanch (6.30 %) were the other personal localite sources ranked II, III, IV and V, respectively. While studying the tribal

farmers Rao and Rao (1994) also come to similar conclusion. Similar results were also reported by Ram (1999).

In the personal cosmopolite sources, a total of seven sources were included. Rural Agricultural Extension Officer (RAEO) ranked first being utilized by 42.96 per cent of the respondents, supported by similar findings reported by Bareth and Intodia (1998) and Lalitha *et al.*, (2002). Input dealer (34.81 %), demonstrations (25.56 %), scientist (18.89 %), kisan mela (11.48 %), training (5.93 %) and ADO / SMS (1.11 %) were the other personal cosmopolite sources and ranked II, III, IV, V VI and VII, respectively.

Among the impersonal cosmopolite i.e., mass media sources, a total of three sources were included in which radio ranked first being utilized by 41.11 per cent of the respondents. Prasad and Gadge (2008) revealed that in Mizoram and Nagaland radio was the most utilised source for getting the information related to the agriculture. Television (10.74 %) and newspaper (5.19 %) were the other mass media sources and ranked as II and III, respectively. Lanjewar (1993) also reported similar results with use of television as information source. Angadi and Swamy (1994), Saxena *et al.*, (1995), Gupta *et al.*, (2003), Maraddi and Verma (2003) were of the similar opinions regarding use of mass media as important source of information.

Credibility of the sources of information

The credibility of the different information sources were recorded from the respondents and results are depicted in Fig.3. The results reveal that scientists, newspaper and demonstration were the most credible sources to respondents with credibility index of 96.08, 92.86 and 92.75, respectively.

Table.1 Cosmo-politeness of the respondents

(n=270)		
Cosmo-politeness	Frequency	Percentage
• Low (Up to 2)	118	43.70
• Medium (2 – 4)	124	45.93
• High (above 4)	28	10.37

Table.2 Sources of Information utilised by the respondents for receiving the information about small millets production technology

(n=270)			
Source	Frequency	Percentage*	Rank
Personal Localite			
• Friend	247	91.48	I
• Relative	126	46.67	III
• Neighbour	208	77.04	II
• Progressive Farmer	64	23.70	IV
• Panch / Sarpanch	17	06.30	V
Personal Cosmopolite			
• RAEO	116	42.96	I
• ADO/SMS	03	01.11	VII
• Scientist	51	18.89	IV
• Kisan Mela	31	11.48	V
• Demonstration	69	25.56	III
• Training	16	05.93	VI
• Input Dealer	94	34.81	II
Impersonal Cosmopolite (Mass Media)			
• Radio	111	41.11	I
• Television	29	10.74	II
• Newspaper	14	05.19	III

*Data are based on multiple responses

Table.3 Utilisation of number of information sources by the respondents for information related to agriculture

(n=270)		
Use of number of information sources	Frequency	Percentage
• Low (1-2 sources)	25	09.26
• Medium (3-5 sources)	164	60.74
• High (6-10 sources)	71	26.30
• Very high (above 10 sources)	10	03.70

Table.4 Extent of contact of the respondents with Extension Personnel

		(n=270)			
Extension Personnel	Never	Occasionally	Frequently	Regular	
• RAEO	154 (57.04)	16 (05.93)	83 (30.74)	17 (06.29)	
• ADO/SMS	267 (98.89)	03 (01.11)	00 (0.00)	00 (0.00)	
• Scientist	219 (81.11)	48 (17.78)	03 (01.11)	00 (0.00)	

* Figures in parentheses show the percentage

Table.5 Participation of the respondents in extension activities

		(n=270)		
Extension Activity	Frequency	Percentage	Rank	
• Provided land for Demonstration	33	12.22	VII	
• Visit to Demonstration plot of neighbour	61	22.59	IV	
• Frequent discussion with Extension Worker	111	41.11	I	
• Participation in Krishak Diwas at farmers' field	51	18.89	V	
• Participation in Extension Meeting	90	33.33	II	
• Participation in Kisan Mela	29	10.74	VIII	
• Visit to Agriculture Exhibition	17	06.30	IX	
• Regular reader of Extension Publications	08	02.96	X	
• Occasionally hearing Agriculture based programme on Radio	74	27.41	III	
• Occasionally watching Agriculture based programmes on TV	43	15.93	VI	
• Visit to College of Agriculture & Research Station	17	06.30	IX	

* Data are based on multiple responses

Table.6 Distribution of the respondents according to their involvement in Various extension activities

		(n=270)	
Involvement in extension activities	Frequency	Percentage	
• Nil	134	49.63	
• Low (Up to 4)	79	29.26	
• Medium (5 – 8)	40	14.81	
• High (above 8)	17	06.30	

Fig.1 Cosmo-politeness of the respondents

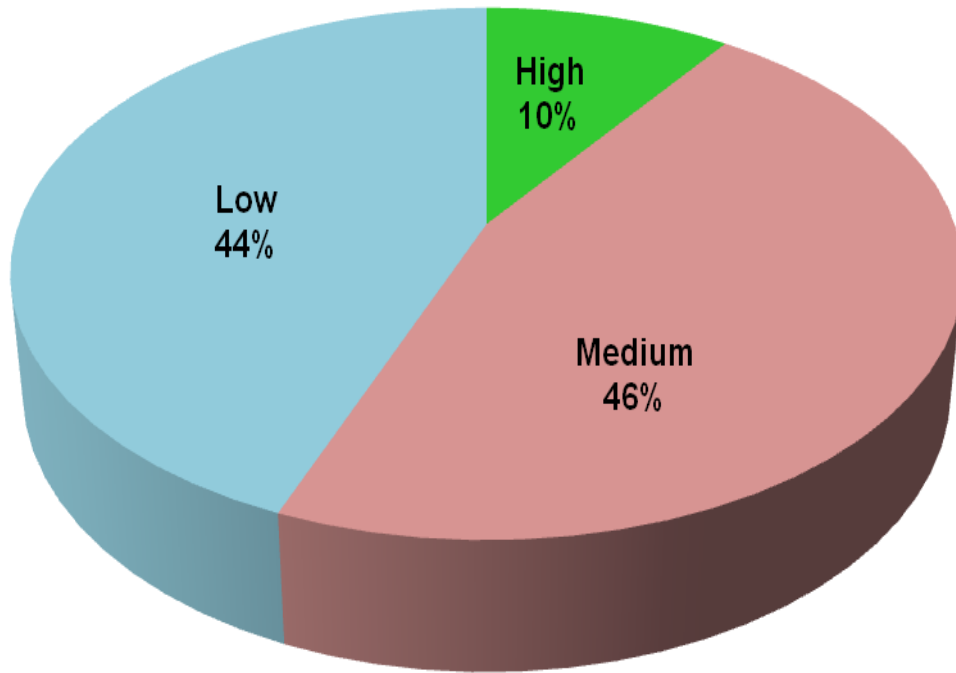
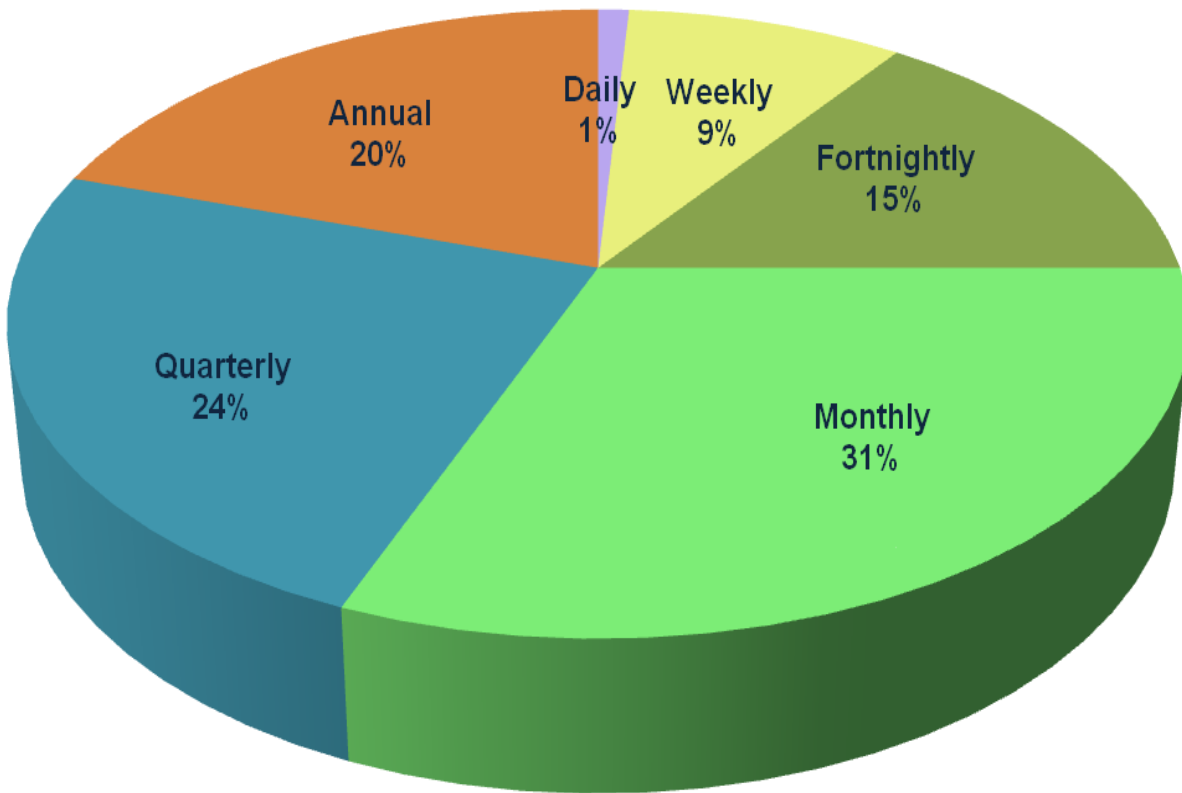


Fig.2 Visiting pattern of the respondents out of their own social system



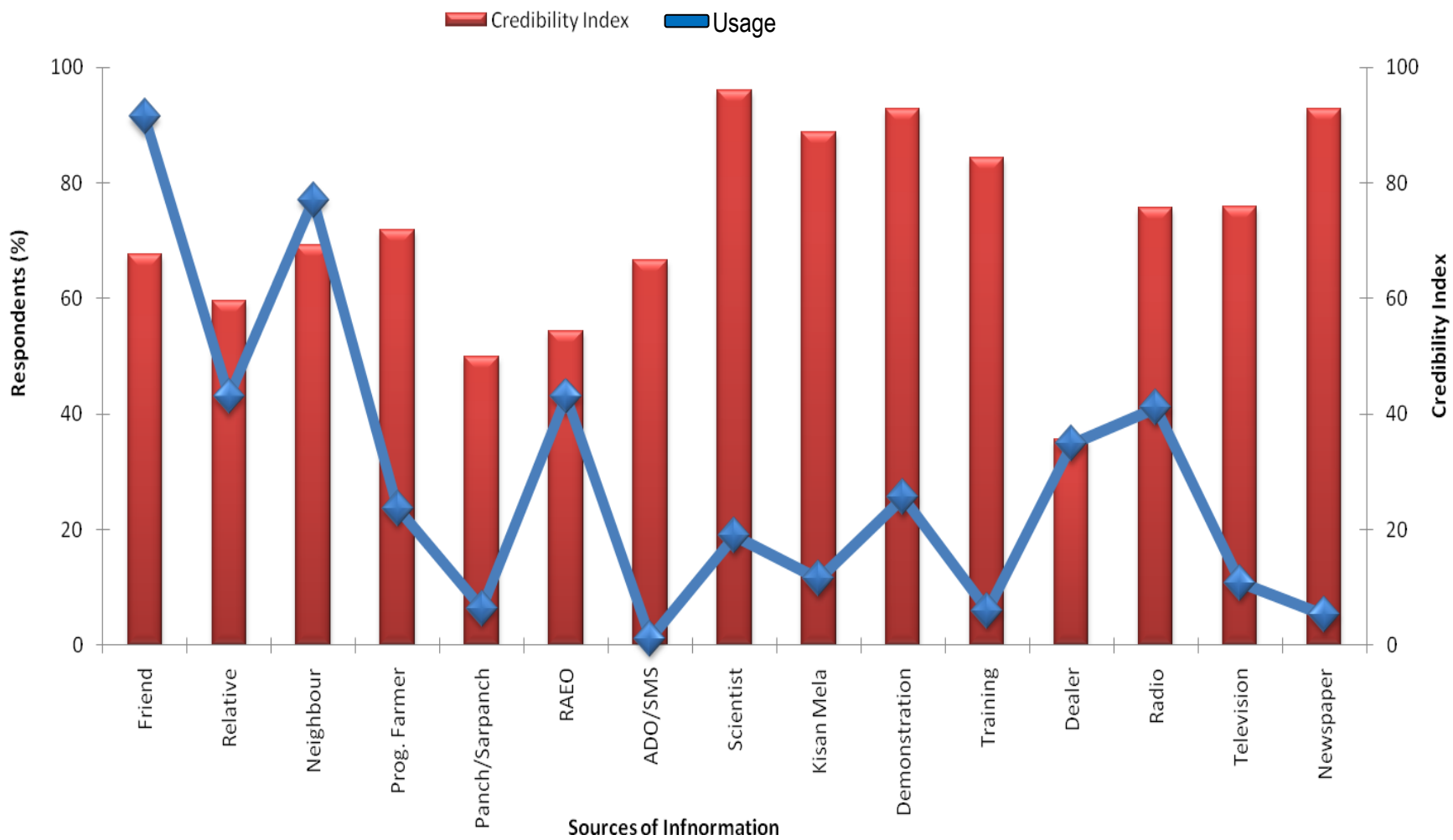


Fig.3 Distribution of the respondents in percent according to their usage of sources of information and their credibility index

The other sources with high credibility index were Kisan mela (88.71), Training (84.38), Television (75.86), Radio (75.68), Progressive farmer (71.88), neighbour (69.23), friend (67.61), ADO / SMS (66.67), relative (59.48), RAEO (54.31), Panch / Sarpanch (50.00) and Input dealer (35.64).

Utilisation of number of information sources

Data on number of information sources being utilized by the individual respondents was recorded and the results are presented in Table 3. The results reveal that majority of the respondents (60.74 %) were utilizing 3-4 information sources, whereas 26.30 per cent of the respondents were using 6-10 sources. Thus, it may be concluded that more than two third of the respondents were utilizing up to five sources of information.

Contact with Extension Personnel

Frequencies of contact with extension personnel (RAEO, ADO / SMS and Scientist) of the respondents were asked and results are compiled in Table 4. Majority of the respondents (57.04 %) never contacted with the RAEO, while 30.74, 6.29 and 5.93 per cent of them had frequent, regular and occasional contact, respectively.

Almost all of the respondents (98.89 %) never contacted with ADO / SMS and only 1.11 per cent had occasional contact. Regarding contact with scientist, majority of the respondents (81.11) had never contacted, while 17.78 per cent and 1.11 per cent had occasional and frequent contact with them. Similar findings were reported by Singh *et al.*, (2004), Venkataramalu *et al.*, (2004), Rajni (2006), Sahu (2006), Deshmukh *et al.*, (2007), Yadav (2007), Dhruw (2008), Patel (2008), Prasad and Gadge (2008) and Yadav (2008).

Participation in Extension Activities

Regarding extension participation a total of eleven extension activities were enlisted and their participation in those activities were recorded from the respondents. Results are presented in Table 5.

The result reveals that maximum participation was in frequent discussion with extension worker by 41.11 per cent of the respondents.

The other extension activities having respondents' participation were participation in extension meeting (33.33 %), occasional hearing of agriculture based programme on radio (27.41 %), and visit to demonstration plot of neighbour (22.59 %). About 18.89 per cent of the respondents had participated in krishak diwas at farmers' field and 15.93 per cent had occasionally watched the agricultural programmes on TV.

The overall extent of involvement of the respondents in various extension activities was computed, compiled and presented in Table 6. Slightly less than half of the respondents were having no involvement in any extension activity. Nearly 30 per cent of the respondents were having low involvement while nearly 15 per cent of them were having medium involvement but only 6¹/₂ per cent of them were having high involvement in different extension activities. Khan *et al.*, (2007) also reported similar findings.

This shows the utmost and urgent need of increasing the involvement of the farmers in the extension activities. Since without increasing the involvement of the farmers in the extension activities it is not possible to increase the productivity and production of the millets and uplift the living standard of the tribal farmers.

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