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## Various promotion measures adopted by rice seed company and awareness about farmers rice seed marketing in Bemetara district of Chhattisgarh

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### Abstract

Study was conducted in 2015-16 in Bemetara district of Chhattisgarh state. We can found that the importance of promotion measures as their effect in rice seed marketing was given most importance field demonstration, visit to research plot, sample distribution, farmers meeting, jeep campaign. Study revealed that most of the farmers. Were unaware about promotion measures used in rice seed marketing such as field demonstration, sample distribution in dealers shop, farmers visit to research plots, slide show, television however they are much aware about some promotional measures such as jeep campaign, and farmers meeting.

**Keywords:** Rice seed, marketing, Chhattisgarh, field demonstration, farmers visits

### Introduction

Seed is the most important component for agriculture. The production of agriculture has increased since five decades, the role of seed industry has occurred in parallel with the growth in agriculture production. With the given fact that, sustain growth to cope with increasing demand would depend more and more on an adoption of innovative technology. The seed would be continuously a vital component decade to come. The private seed industry is no more confident to just production and marketing of seed. It has as well acquired technological strength to cater to vital need of tomorrow (Gadwal, 2003).

Indian seed industry has been growing awfully quantity and value over last fifty years both for public and private sectors, corporation, companies or actively involving in quality seed production. The public-sector component comprises of National Seed Corporation (NSC), State Farm Corporation (SSCS), Indian Council of Agriculture Research (ICAR) Institution and Agriculture Universities.

The private sector comprises around 150 seed companies of national and foreign origin but only few companies like M/s Bejosheetal, Indo American Hybrid Seed, Naamdhari Seed are working exclusive on vegetable hybrids. (Koundiny & Kumar 2014).

India has unsaturated demand, as per variety rice seed and therefore, formalization of trade between India and Bangladesh will expand local seed market and help farmers to access desired variety at affordable price at right time (Debashish Giri, Managing Director Debgiri Agro Product, Discussion Paper, 2015).

Indian seed market is undergoing an important transformation for the past one-decade and more. The increasing private participation in seed production, development of new varieties for value added crops, and introduction of genetically modified varieties has characterized the new seed regime. The new seed policy definitely shaped the growth of private participation joined by the global seed companies. However, breeder activity is still predominantly undertaken by the state through agricultural universities and other research institutes. Even though the reliance on market for the development of seeds and varieties marks new seed regime, we are yet to evolve a fool proof regulatory mechanism that ensures quality and standards in production of seeds and effective laws to deal with failures associated with thereof. This became pretty clear in the recent experiences of agrarian crisis faced by the farmers in Andhra Pradesh and elsewhere. The problems associated with seeds in terms of spurious seeds, failure of yields, and lack of compensation mechanisms seriously exposed the lacunae in the regulatory regime for which the government finally responded with a new draft bill. It is important to understand the process of establishment of market dominated seed regime to appraise its relative merits and limitations. It is an established fact that private seed sector has taken firm roots in production by now. Yet it is important to identify the complementary institutions that support the successful working of market. (Prospect and Challenge of Seed Marketing in Costal Andhra 2014)

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## Materials and methods

This chapter deal with the materials and research methodology adopted for the present study with respect to the selection of area, selection of respondents, collection of data and analytical techniques. The details of the method and technique adopted for the present study are described as below.

### Selection of study area

Chhattisgarh state consists of 27 districts, out of which Bemetara district was selected purposively for the present study because Bemetara district was five largest producer of rice seed in state. There are four blocks namely Saja, Berla, Navagarh and Bemetara within Bemetara district, among them Bemetara, and Saja block were selected since they were largest rice seed producing blocks among the four blocks of Bemetara district. (Deputy Directorate of Agriculture, Bemetara, C.G.)

### Selection of villages

The Bemetara, and Saja block consist of 187 and 97 number of villages. Out of them, five villages were considered from each of the selected blocks. Lolesara, Bahera, Kevachi, Gampur and Baiji villages from Bemetara however, Khati, Matara, Chikhla, Karesara and Sauri from Saja block were selected being the leading rice growing village in the two selected blocks, respectively.

### Selection of respondents (rice growers and rice seed dealers)

Farmers doing rice cultivation were considered as respondents to collect the required information on purchased brand or company, factor influencing for rice seed purchasing, major promotion sources for rice seed purchase, and problems in rice seed marketing in the study. Five hybrid rice growers was selected from the 10 sample villages of 2 block of the district, which comprise of a total number of 50 hybrid rice growers were selected for study.

The detail of selection of respondent (hybrid rice growers) is given below

**Table 1:** Selection hybrid rice growers

| S.NO. | Bemetara Block | Bemetara District |   |          |    |
|-------|----------------|-------------------|---|----------|----|
|       |                | Saja Block        |   |          |    |
| 1     | Lolesara       | 5                 | 1 | Khati    | 5  |
| 2     | Baiji          | 5                 | 2 | Sauri    | 5  |
| 3     | Kevachi        | 5                 | 3 | Matara   | 5  |
| 4     | Bahera         | 5                 | 4 | Chikhla  | 5  |
| 5     | Gampur         | 5                 | 5 | Karesara | 5  |
|       | Total          | 25                |   | Total    | 25 |

### 3.4 Selection of hybrid rice seed dealers

There were 21 hybrid rice seed dealers and 12 retailers were functioning in vicinity area os bemetara district. To undertake the market structure and sale promotion adopted by various companies, 10 hybrid rice seed dealers and 5 retailers were undertaken for the study.

## Data collection

### Primary data collection

With respect to the different objectives of the study, the primary data were collected by personal interview through the well designed, pre-tested questionnaires (Appendix I and II), during the study year 2015-16 kharif season. The primary data included grown rice seed, purchased brand or company for

rice seeds, factors influencing for rice seed purchasing, major promotion sources for rice seed purchase, and problems in rice seed marketing. Similarly, primary data also collected from dealers which included their sales income and problems faced by them in rice seed marketing.

### Secondary data collection

The secondary data were collected on the aspects to represent the profile of bemetara district viz., Demographical features distribution of land holding, cropping pattern, source of irrigation and administrative profile. This information is used to represent the socio-economic profile of study area. The secondary data were collected from the state department of statistics and planning for the year 2015-16.

### Period of the study

The detail enquiry or study was done for the agriculture year 2015-16 *kharif* season.

### Analytical Framework

The details of analytical tools and techniques were used and presented as follows:

### Gini-coefficient

Gini-coefficient was used for analyze market structure at dealers level in hybrid rice seed marketing.

### Formula

Gini-coefficient (GC) =  $1 - \sum XY$

Where X= proportion of seller and Y= cumulative proportion of total sales.

GC = 0 means equal distributed market.

GC = 1 means unequal distributed market.

### Garrett's ranking technique

Garrett's ranking technique was used to analyze most influencing factor while purchasing hybrid rice seed by the farmers such as yield, price, germination percentage, brand etc.

### Formula

Per cent position =  $100(R_{ij} - 0.5) \div N_j$

Where  $R_{ij}$  = rank given for the  $i$ th factor by  $j$ th farmer and

$N_j$  = Number of factors.

By referring to Garrett's ranking technique, the per cent position estimated was converted into scores and then for each factor, the scores of various respondents were added and the mean values were calculated. The factor with the highest mean value was considered as the most important reason for purchasing rice seed.

### Brief profile of the study area

A brief description of various geographical and agriculture features of the study area, i.e. Bemetara district in Chhattisgarh state is being given in this section.

### Description of Bemetara district

Bemetara District is situated in the fertile plains of Chhattisgarh Region. The District is surrounded by Mungeli in North, Durg in South, Rajnandgaon and some part of Kawardha in East and Raipur and some part of Balauda Bazaar in West. The district located near the centre of large plain some time referred as the "rice bowl of india" where hundreds of rice of varieties of rice grown. The Shivnath river flows to the east of the city of Bemetara and southern side has

dense forest the maikal hills rise on the north west of the Bemetara on the north the land rises in menses with chhota Nagpur plataue which extends north-east cross. This District is situated between 21° 71' North Latitude and 81° 53' East Longitude. Shivnath is the principal river of this district.

Chhattisgarh is rich in forest resources about 44 percent of the total area of the state is under forest cover. Detailed information about the geographical area of Raipur district is given in (Table no. 3.5). Chhattisgarh is famous in the entire country for its Sal forest. In addition teak, bamboo, saja, sarai, haldi etc are also found in large number tendu leaf which is used in beedi making, is the principal forest of the state. Chhattisgarh produce a large number of minor forest product as well. The climate of Chhattisgarh is mainly of minor tropical, humid and sub- humid. The climate is hot because of its positioning on the tropic of cancer. May is the hottest month and the December – January is the coldest month. The state is completely dependent on monsoon for rains. The average annual rainfall of Bemetara district is 754.40 mm. Bemetara district has 4 blocks. The study was confined to the Bemetara and Saja block of Bemetara district of Chhattisgarh (Map-II).

### Demographic features of Bemetara District

The total population of district is 79533s4 (2011 census). The density of population is 698 per Sq. Km. out of which 59.09 per cent is urban and 40.91 per cent is rural. The population of schedule caste and schedule tribes constitutes 16.59 per cent and 4.30 per cent and 50.95 per cent is male population and 49.05 per cent is the female population, respectively of the total population. The literacy rate in the district was 80.52 per cent. (District Planning and Statistical Office).

### Distribution of land holding of Bemetara District

The distribution of land holding according to size and the total cultivated area in each category are in the given table no. 3.3. The largest number of land holding falls under marginal category. It is clear from this table that concentration of marginal farmers are more as compare to small, medium and large group, implying that the majority of land owner are in marginal categories in the study area. The largest number of land holding falls under marginal farm size category. However, farmers in the category owned only a small proportion of the cultivated land.

## Results and discussion

### Promotional measures of rice seed marketing

| S. No. | Factors                       | Ranks |    |    |    |    |    |    | Total no. of farmer | Total score | Mean scores | Ranking |
|--------|-------------------------------|-------|----|----|----|----|----|----|---------------------|-------------|-------------|---------|
|        |                               | 1     | 2  | 3  | 4  | 5  | 6  | 7  |                     |             |             |         |
| 1      | Field demonstration           | 17    | 7  | 0  | 0  | 11 | 2  | 7  | 44                  | 2493        | 49.86       | II      |
| 2      | Farmer visit to research plot | 0     | 2  | 21 | 19 | 2  | 0  | 1  | 45                  | 2386        | 47.72       | IV      |
| 3      | Jeep campaign                 | 6     | 1  | 7  | 7  | 18 | 2  | 6  | 47                  | 2287        | 45.74       | V       |
| 4      | Farmer meeting                | 14    | 8  | 17 | 0  | 0  | 0  | 4  | 43                  | 3642        | 72.84       | I       |
| 5      | T. V.                         | 6     | 0  | 5  | 0  | 7  | 26 | 3  | 47                  | 2007        | 40.14       | VII     |
| 6      | Radio                         | 3     | 7  | 7  | 1  | 7  | 6  | 18 | 49                  | 2031        | 40.62       | VI      |
| 7      | Sample distribution           | 1     | 14 | 8  | 9  | 4  | 9  | 3  | 48                  | 2450        | 49          | III     |

To know the major promotional measures which influence to farmers was estimated by using Garrett analysis and presented in Table 4.8 and fig 4.6. It reveals that farmers 'meeting adopted by company was the most effective promotional measure that adopted by company, the mean score value of Garrett analysis and ranked I was 72.84 and found to be the maximum followed by field demonstration, sample distribution for ranked -II and III, respectively, It is important to note that television (TV), radio and farms visit to research

farm were not the significant promotion strategies of seed companies.

Thus, it could be concluded that farmer s 'meeting was the most effective promotion measures adopted by seed companies.

### Farmer's awareness about the promotion measures of rice seed marketing

| S. No. | Factors                       | Ranks |    |    |    |    |    |    | Total no. of farmer | Total score | Mean scores | Ranking |
|--------|-------------------------------|-------|----|----|----|----|----|----|---------------------|-------------|-------------|---------|
|        |                               | 1     | 2  | 3  | 4  | 5  | 6  | 7  |                     |             |             |         |
| 1      | Field demonstration           | 3     | 7  | 7  | 1  | 7  | 6  | 18 | 49                  | 2031        | 40.62       | VI      |
| 2      | Farmer visit to research plot | 0     | 2  | 21 | 19 | 2  | 0  | 1  | 45                  | 2386        | 47.72       | IV      |
| 3      | Jeep campaign                 | 17    | 7  | 0  | 0  | 11 | 2  | 7  | 44                  | 2493        | 49.86       | II      |
| 4      | Farmer meeting                | 14    | 8  | 17 | 0  | 0  | 0  | 4  | 43                  | 3642        | 72.84       | I       |
| 5      | T. V.                         | 1     | 14 | 8  | 9  | 4  | 9  | 3  | 48                  | 2450        | 49          | III     |
| 6      | Radio                         | 6     | 1  | 7  | 7  | 18 | 2  | 6  | 47                  | 2287        | 45.74       | V       |
| 7      | Sample distribution           | 6     | 0  | 5  | 0  | 7  | 26 | 3  | 47                  | 2007        | 40.14       | VII     |

To know the farmers awareness of promotion measures which influencing to farmers was estimated by using Garrett analysis and presented in Table 4.13 and fig 4.11. It reveals that farmers meeting most awareness about the promotion measures of rice seed marketing, the mean score value of Garrett analysis was 72.84 and found to be the maximum and ranked I, followed by jeep campaign, television (TV) ranked -II and -III respectively. It is important to note that radio and farmers visit to research farm, field demonstration and sample distribution were not potentially aware about the promotion measures of rice seed marketing. Thus, it could be concluded that farmers meeting and jeep campaign was the most awareness of promotion measures of rice seed marketing.

### Summary and conclusions

1. In the importance of promotion measures as their effect in rice seed marketing was given most important field demonstration, visit to research plots, sample distribution, farmer's meeting, jeep campaigns, television and in dealers' shop', radio and slide show.
2. Study revealed that most of the farmers were unaware about promotion measure used in rice seed marketing such as field demonstration, sample distribution in dealer's shop, farmers visit to research plots, slide show, television however they are much aware about some promotion measures such as jeep campaigns and farmers meeting.

3. Farmer's meeting and jeep campaigns were the major promotion measures perceived by the farmers in the study area.

### **Suggestion**

1. Farmer' meeting, field demonstration and sample distribution were three promotion measures which found to be major promotion measures perceived by the farmers so seed companies should deliver promotional messages through this measures.
2. Field demonstration, farmer visit to research farm and sample distribution ' were three promotion measures to which farmers give good importance so seed companies should look on this aspects while making promotional strategies in rice seed marketing

### **References**

1. Addison M, Mensah PS, Edusah SE. "Assessing Ghana's initiative of increasing domestic rice production through the development of rice value chain", *Global Science Research Journals*. 2015; 3(4):230-237.
2. Agrawal PK. Future growth drivers for the Indian seed industry. *Journals of International Seed Testing Association*. 2012; 144:4-9.
3. Nandi AK, Das B, Sable M. Production and marketing strategy of seeds for developing countries. *Journal of Crop and Weed*. 2013; 9(1):32-35
4. Panthee DR. Seed production, quality control, and marketing and distribution system in Nepal. *Lumle Regional Agricultural Research Centre Review Paper*. 1995; 95(01):23.
5. Rethinapandy A, Selvakumar M. Analysis of factor influencing the preference for the selection of cosmetics products by the respondents using Garrett's ranking technique. *Indian Journal of Applied Research*, 2013, 3(5).