

## **Market Share of the Paddy Seed in Bhoodan Pochampally Market and Surrounding Areas of Yadadri Bhuvangiri District in Telangana**

### **Abstract**

Before Independence in 1925 Royal Commission on Agriculture was involved in the production and distribution of seeds and quality, improved seeds were imported from Australia, the UK, USA, Germany, etc., until 1939. Later on, the National Seed Corporation (NSC) was established in 1963, and the Indian Seed Act was enacted in 1966, which resulted in the production of quality and improved seeds with proper seed certification and standards. Rice is the chief crop grown in India with a total cultivation area of 44 Mha and total production of 117.47 MT. A study was organized to examine the market share of paddy seed in the Bhoodan Pochampally market and Yadadri Bhuvangiri district in Telangana. The study is based on primary data, which was collected from distributors and farmers through a pre-tested interview schedule, and secondary data, which was collected from the district department of agriculture, the district planning and statistical office, and various websites. Among those 4 mandals, 5 villages from each Mandal that means 20 villages were selected randomly for data collection. From every village, 10 farmers were selected randomly. Out of the total 200 farmers, marginal farmers (up to 1 Ha) were 12%, small (1 to 2 Ha) were 37%, semi-medium (2-4 Ha) was 29%, medium (4-10 Ha) were 16% and large farmers (above 10 Ha) were 6%. It was found that among the three types of paddy, open-pollinated paddy has the highest market share in the market area, *i.e.*, 12,95,000 kg (79 percent), followed by research paddy, *i.e.*, 1,95,650 kg (12 percent), and hybrid paddy, *i.e.*, 1,55,750 kg (9 percent) in the market area.

### **Introduction**

The seed industry in India is growing at a CAGR of 17 percent, which is quite higher when compared to the global growth rate of 7 percent. Before Independence in 1925, the Royal Commission on Agriculture was involved in the production and distribution of seeds, and quality, improved seeds were imported from Australia, the UK, USA, Germany, etc., until 1939. But from the 1950s, several private companies emerged and involved in the production and distribution of quality seeds for various crops. In 1960, the Indian Council of Agricultural Research set up a committee that paved a way for the establishment of central and state seed

agencies for the production of foundation seed, for the development of seed certification agencies, for the enactment of the national seed acts, and for stimulating the development of the private seed industry. Later on, the National Seed Corporation (NSC) was established in 1963, and the Indian Seed Act was enacted in 1966, which resulted in the production of quality and improved seeds with proper seed certification and standards.

Rice is the chief crop grown in India, with a total cultivation area of 44 Mha and a total production of 117.47 MT. India ranks second in rice production in the world. It is a tropical plant that can grow in hot and humid climates and performs very well in rain-fed areas as it requires more water. Rice in India is cultivated by both traditional and modern methods but harvesting is mostly done by traditional methods. India West Bengal, Uttar Pradesh, Andhra Pradesh, Punjab, Bihar, and Telangana are the major paddy-cultivating states in India. Rice production is highest in West Bengal (14.97 MT), followed by Uttar Pradesh, Punjab, and Andhra Pradesh.

**Table 1: Area, production, and productivity of paddy in various countries in 2017**

S.No.	Country	Area (000' Ha)	Production (000' Tonnes)	Productivity (Kg/Ha)
1.	China	30747	<b>212676</b>	<b>6917</b>
2.	India	<b>43789</b>	168500	3848
3.	Indonesia	15788	81382	5155
4.	Bangladesh	11272	48980	4345
5.	Vietnam	7709	42764	5548
6.	Thailand	10615	33383	3145
7.	Philippines	4812	19276	4006
8.	World	167249	769658	4602

*Source: FAOSTAT (as on 08.01.2020).*

**Table 2: Paddy Area, production and yield during 2016-17 and 2017-18 in major producing states (Area in Mha, production in MT, and productivity in Kg/Ha)**

S. NO.	State	Area		Production		Productivity	
		2016-17	2017-18	2016-17	2017-18	2016-17	2017-18
1.	West Bengal	5.50	5.12	15.30	14.97	2784	2926
2.	Uttar Pradesh	5.99	5.81	13.75	13.27	2295	2283
3.	Punjab	2.90	3.07	11.59	13.38	-	-
4.	Odisha	3.85	3.77	8.33	6.55	2160	1739
5.	Andhra Pradesh	2.11	2.16	7.45	8.17	3540	3788
6.	Bihar	3.34	3.31	8.24	8.09	2467	2447
7.	Chhattisgarh	3.83	3.76	8.05	4.93	-	-
8.	Tamilnadu	1.44	1.83	2.37	6.64	1642	3630
9.	Assam	2.47	2.43	4.73	5.28	1916	2171
10.	Telangana	1.68	1.96	5.17	6.26	3075	3192

**Source: Directorate of Economics & Statistics, DAC&FW**

The following objective had been designed to undertake a project/research work in the study area:

1. To examine the market share of the paddy seed in the Bhoodan Pochampally market and surrounding areas of Yadadri Bhuvangiri district in Telangana.

### **Materials and Methods**

The study is based on primary data, which was collected from distributors and farmers through a pre-tested interview schedule, and secondary data, which was collected from the district department of agriculture, the district planning and statistical office, and various websites. The present study was confined to the Yadadri Bhuvangiri district in Telangana State since it has one of the largest areas under paddy cultivation in the state.

**Table 3: Names of the selected villages from four mandals:**

S.No.	Name of the Mandal	S.No.	Name of the villages
		1.	Gokaram

1.	Valigonda	2.	Akkampalle
		3.	Nathallagudem
		4.	Arur
		5.	Nagaram
		6.	Revanpally
2.	Bhoodanpochampally	7.	Jalapur
		8.	Shivareddygudem
		9.	Gousekonda
		10.	Muktapur
		11.	Raghapuram
3.	Bibinagar	12.	Rudravalle
		13.	Venkirala
		14.	Pallegudem
		15.	Raheemkhangudam
		16.	Bopparam
4.	Nakrekal	17.	Gurajala
		18.	Kasannagudem
		19.	Kothapeta
		20.	Gudivada

**Table 4: Selection of farmers from different mandals**

S.No.	Mandal Name	No. of villages from each Mandal	No. of farmers selected from each village	Total farmers selected
1	Valigonda	5	10	50
2	BhoodanPochampally	5	10	50
3	Bibinagar	5	10	50
4	Nakrekal	5	10	50
<b>Total</b>		<b>20</b>		<b>200</b>

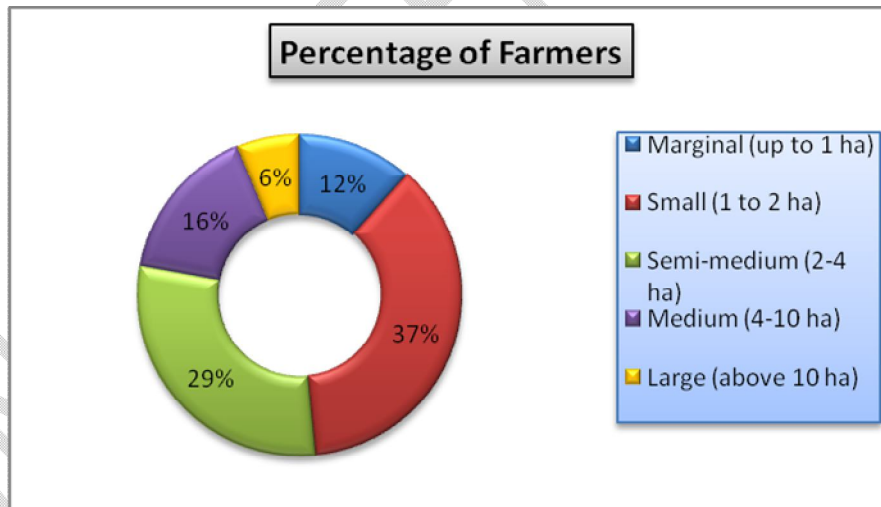
Four mandals Bhoodan Pochampally, Valigonda, Bibinagar, and Nakrekal part of Choutuppal in Yadadri Bhuvanagiri district of Telangana state were assigned for the project by the JK seeds.

Among those 4 mandals, 5 villages from each Mandal that means 20 villages were selected randomly for data collection. From each village 10 farmers were selected randomly and dealers present in the specific Mandal region were interviewed so the sample of the study constitutes 200 farmers and 18 dealers. The study was conducted in February and March 2020 (2 months).

## Results

**Table 5: Classification of farmers according to the size of land holding**

S.No.	Particular	No. of farmers	The average size of land holding (Ha)
1	Marginal (up to 1 Ha)	22	0.80
2	Small (1 to 2 Ha)	70	1.21
3	Semi-medium (2-4 Ha)	56	2.42
4	Medium (4-10 Ha)	30	4.85
5	Large (above 10 Ha)	12	12.14
	Total	200	



**Fig 1: Percentage of farmers according to the size of land holding.**

Out of the total 200 farmers, the farmers were again divided into five categories based on the size of land holding, they are marginal farmers (up to 1 Ha) 12%, small (1 to 2 Ha) 37%, semi-medium (2-4 Ha) 29%, medium (4-10 Ha) 16% and large farmers (above 10 Ha) 6%.

### Market share of paddy seed in the study area

The market share of OP Paddy, Hybrid paddy, and Research paddy in four mandals is mentioned below.

The Table 6 and Figures 2 and 3 show that among the three types of paddy, open-pollinated paddy has the highest market share in the market area *i.e.*, 12,95,000 Kg (79 percent) followed by research paddy *i.e.*, 1,95,650 Kg (12 percent) and hybrid paddy *i.e.*, 1,55,750 Kg (9 Per cent) in the market area.

Table 6 and figure 2 also indicate that in the Nakrekal area, open-pollinated paddy has the highest market share *i.e.*, 4,35,500 Kgs (75 percent) followed by research paddy (20 percent) and hybrid paddy *i.e.*, 27,600 (5 percent).

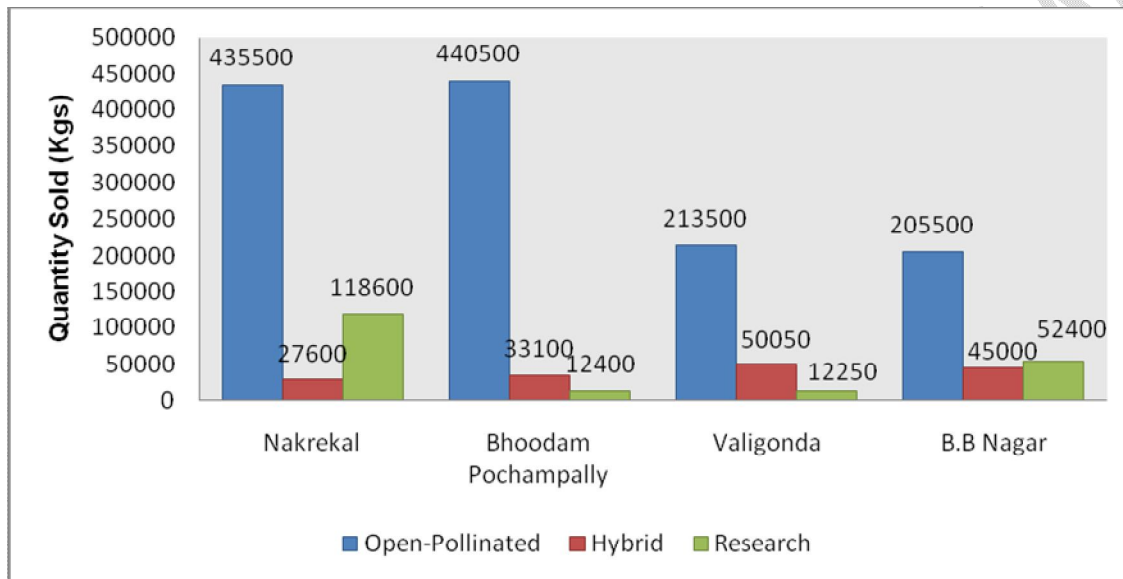
**Table 6: Market share of 3 types of paddy sold (Kg) at four mandals:**

S.No	Mandal	Open-Pollinated	Hybrid	Research	Total
1	Nakrekal	4,35,500	27,600	1,18,600	5,81,700
2	BhoodamPochampally	4,40,500	33,100	12,400	4,86,000
3	Valigonda	2,13,500	50,050	12,250	2,75,800
4	Bibinagar	2,05,500	45,000	52,400	3,02,900
5.	<b>TOTAL</b>	<b>12,95,000</b>	<b>1,55,750</b>	<b>1,95,650</b>	<b>16,46,900</b>
6.	<b>Percentage (%)</b>	<b>79</b>	<b>9</b>	<b>12</b>	<b>100</b>

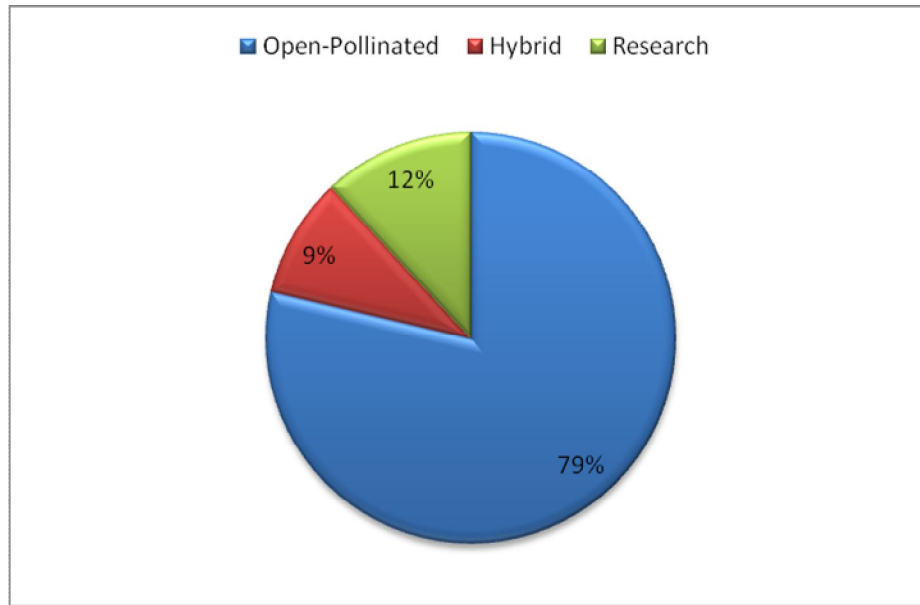
In Bhoodan Pochampally Mandal, open-pollinated paddy has the highest market share *i.e.*, 4,40,500 Kg (90 percent) followed by hybrid Paddy *i.e.*, 33,100 (7 percent) and research paddy *i.e.*, 12,400 Kg (3 percent).

In Valigonda Mandal the open-pollinated paddy has the highest share *i.e.*, 2,13,150Kg (77 percent) followed by hybrid paddy *i.e.*, 50,050 (18 percent), and research paddy *i.e.*, 12,250 Kg (5 percent).

In Bibinagar mandal, open-pollinated paddy has the highest share *i.e.*, 2,05,500Kg (67 percent) followed by research paddy *i.e.*, 52,400 (17 percent), and hybrid paddy *i.e.*, 45,000 (14 percent).



**Figure 2: Graphical representation for a market share of three types of paddy at four mandals.**



**Figure 3: Schematic representation of a market share of different types of paddy seed in the study area**

### Conclusion

The majority of the farmers surveyed had small to medium-sized land holdings. It was found that among the three types of paddy, open-pollinated paddy has the highest market share in the market area *i.e.*, 12,95,000 Kg (79 per cent) followed by research paddy *i.e.*, 1,95,650 Kg (12 per cent) and hybrid paddy *i.e.*, 1,55,750 Kg (9 per cent) in the market area.

### References

1. <https://www.mordorintelligence.com/industry-reports/india-rice-seed-market>
2. <https://www.icfa.org.in/assets/doc/reports/Seeds.pdf>
3. Abhishek Raj and Jayant Zechariah ( 2022) Market potential of hybrid paddy seed brands in Pathalgaon block of Jashpur district of Chhattisgarh, *The Pharma Innovation Journal* 2022; SP-11(4): 155-158.
4. [http://agmarknet.gov.in/Others/rice-paddy-profile\\_copy.pdf](http://agmarknet.gov.in/Others/rice-paddy-profile_copy.pdf)
5. Anonymous (2022) Seed business : Indian Scenario, *Spice*, 1(2), 1-8.

6. A.R. Shrivanthi and Dasarathi Sahoo (2022) Market Potential and Promotional Strategies for VSPL Hybrid Paddy Seeds in Koraput District of Odisha, *Indian Res. J. Ext. Edu.* 22 (5), 230-236.
7. <http://nsai.co.in/storage/app/media/uploaded-files/Detailed%20note%20for%20NABARD.pdf>
8. <https://www.theinsightpartners.com/reports/rice-seeds-market>
9. [https://agrilinks.org/sites/default/files/india\\_rice\\_egs\\_case\\_study\\_0.pdf](https://agrilinks.org/sites/default/files/india_rice_egs_case_study_0.pdf).

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