

**Market Share & Farmer's Perception of
Hybrid Rice Seed with Special Reference to
JK Agri. Genetics Pvt. Ltd. In Yadadri
Bhuvanagiri District of Telangana**

PROJECT REPORT

Submitted to

Jawaharlal Nehru Krishi VishwaVidyalaya, Jabalpur

In partial fulfillment of the requirement for the Degree of

MASTER OF BUSINESS ADMINISTRATION

In

AGRI BUSINESS MANAGEMENT

By

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2020

CERTIFICATE –I

This is to certify that the project report entitled, “**Market share & Farmer’s Perception of Hybrid Rice Seed with Special Reference to JK Agri Genetics Pvt. Ltd. in Yadadri Bhuvanagiri District of Telangana**” Submitted in partial fulfillment of the requirement for the degree of **MASTER OF BUSINESS ADMINISTRATION in AGRI BUSINESS MANAGEMENT** in the Institute of Agri-Business Management, Department of Agriculture Economics & Farm Management, Jawaharlal Nehru Krishi VishwaVidyalaya, Jabalpur is a record of the bonafide research work carried out by **BORA ASHOK KUMAR, Enrollment no. 180108020** under my guidance and supervision. The subject of the project report has been approved by the student’s advisory committee and the Director of instructions. All the assistance and help received during the investigation have been acknowledgment by him.

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Member	Dr. (Smt) B. Das

CERTIFICATE –II

This is to certify that the project report entitled, “**Market share & Farmer’s Perception of Hybrid Rice Seed with Special Reference to JK Agri Genetics Pvt. Ltd. in Yadadri Bhuvanagiri District of Telangana**” Submitted by **Mr. BORA ASHOK KUMAR** Enrollment no. **180108020** to the Jawaharlal Nehru Krishi VishwaVidyalaya, Jabalpur in partial fulfillment of the requirement for the degree of **MASTER OF BUSINESS ADMINISTRATION in AGRI BUSINESS MANAGEMENT** in the Institute of Agri-Business Management, (Department of Agriculture Economics & Farm Management), College of Agriculture, JNKVV, Jabalpur, has been after evaluation approved by the external examiner and by the student advisory committee after an oral examination on the same.

Date:
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JK AGRI GENETICS LTD

ST : JKAL:2020-21

Date: 05.11.2020

TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Mr. Bora Ashok Kumar** was associated with **JK Agri Genetics Ltd**, for Internship Project Training for a period of **Two months** from 15th February 2020 onwards.

He has successfully delivered all the objectives put forth by our Company for the project **“To Evaluate the Paddy share & Market potential and farmers need surrounding locations of Bhongir - Telangana market”**.

We feel privileged to be associated with **Jawaharlal Nehru Krishi Vishwa Vidhyalaya – Jabalpur, Madhya Pradesh** and wish her success in all his future endeavors.

Thanking you,

for JK Agri Genetics Limited

Keerthi Reddy

Head – Human Resources



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Declaration and Undertaking by the Candidate

I, Bora Ashok Kumar, S/o Bora Yarrannaidu certify the work embodied in the project report entitled, **“Market share & Farmer’s Perception of Hybrid Rice seed with Special Reference to JK Agri Genetics Pvt. Ltd. in Yadadri Bhuvanagiri District of Telangana”** is my own first-hand bonafide work carried out by me under the guidance of **Dr. H. O. Sharma**, Associate Professor, Department of Agriculture Economics and Farm Management, JNKVV, Jabalpur.

The matter embodied in the project report has not been submitted for the award of any other degree/diploma. Due credit has been made to all the assistance and help.

I, undertake the complete responsibility that any act of misinterpretation, mistakes, and errors of fact are entire of my own.

I, also abide by the decision taken by my advisor for the publication of material extracted from the project report work and subsequent improvement, on a mutually beneficial basis, provided the due credit is given, thereof.

Place: Jabalpur

Date:

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Student

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Copyright Transfer Certificate

Title of the Project : **“Market share & Farmer’s Perception of Hybrid Rice seed with Special Reference to JK Agri Genetics Pvt. Ltd. in Yadadri Bhuvanagiri District of Telangana”**

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With great memories.....

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Place: Jabalpur
Dated:

Bora Ashok Kumar

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List of Abbreviations Used

%	-	Percentage
°C	-	Degree Celsius
QPM	-	Quality Protein Maize
Cm	-	Centimeter
CMS	-	Cytoplasmic Male Sterility
ft.	-	Feet
Ha	-	Hectares
HYVs	-	High Yielding Varieties
ISTA	-	International Seed Testing Association
Kgs	-	Kilograms
Lha	-	Lakh Hectares
Mm	-	Millimeter
Mha	-	Million Hectares
MT	-	Million Tonnes
QA	-	Quality Assurance
R&D	-	Research and Development
Sq. Kms	-	Square Kilometers
USD	-	United States Dollar
Ac	-	acre

Chapter – I
INTRODUCTION

INTRODUCTION

A seed is a basic agricultural input and it is an embryo, embedded in the food storage tissue. A seed is also defined as a mature ovule which consists of an embryonic plant with storage of food and surrounded by a protective seed coat. The agricultural sector is highly dependent on the availability and quality of seeds for a productive harvest. The response of all other inputs depends on the quality of seeds to a large extent and estimated 15 – 20% contribution of quality seed alone to the total production which is depending upon the crop and it can be further raised to 45% with efficient management of other inputs. Today, the Indian seed industry is the fifth largest seed market in the world and is valued at more than Rs 2500 crores. The seed industry has grown steadily in the last four decades. Several transformations have taken place in this sector like rising penetration of the organized sector, growth in contract farming, increasing role of the private sector in processing, branding, and marketing, etc. The government took many progressive and reformative steps in the last three decades for the growth of the seed sector in the country. In terms of global trade, India is almost self-sufficient in flowers, fruits and vegetables, and field crop seeds. Research also has related to quality enhancement technologies such as cereals with higher proteins, minerals, and vitamin contents like Golden rice, QPM, and Fe and Zn enriched millets. The Indian seed industry is accounting for 4.4 % of the global seed market after the U.S. (27%), China (20%), France (8%), and Brazil (6%). In terms of global trade.

1.1: Structure of the seed sector

Although the Indian seed market is one of the largest, it is almost exclusively supplied by locally produced seed. Farmers retain the seed of major food crops (wheat, rice, sorghum, millet, corn, and pulses) and commercial crops for many years and the largest volume of seed trade involves the local exchange of established self-pollinating varieties. The use of hybrid seeds is mostly confined to cotton and some extent to corn, millet, sunflower, and few vegetables. However, awareness about the high yield and quality of produce from hybrid seeds, attracting farmers to switch over to

hybrid, is growing. The Indian seed industry used to be dominated by public sector seed companies. However, following the easing of government regulations and the implementation of a new seed policy in 1988, the private sector seed companies have started playing a major role in seed development and marketing.

1.2: Major Players in the seed industry

Rallis India Ltd, Advanta Seeds (UPL), Nuziveedu Seeds Ltd, Kaveri Seeds Ltd, National Seeds Corporation Ltd., PHI Seeds Private Ltd (DuPont Pioneer), Monsanto India Ltd, Mahyco, Rasi Seeds, JK Agri Genetics Ltd, VNR Seeds, Syngenta India Ltd Mahendra, Bio-seed.

1.3: RICE (*Oryza sativa*)

Rice productivity growth is critical to improving the livelihoods of households throughout Asia. Higher yields increase on-farm incomes and ensure supplies of rice that reduce or stabilize prices for both urban and rural food-insecure households (see, for example, Lin and Pingali 1994).

The first commercial hybrid rice varieties were released in China in 1976 India also started this program in the year 1989. Rice is the second-largest cereal production after corn, including white rice and brown rice, grown mostly in the eastern and southern parts of the country. After this grand success, many countries then started the hybrid rice breeding program. Rice is a staple food for more than half of the world's population with more than 700 MT produced annually (equivalent to 470 MT) of milled rice. Moreover, Hybrid rice represents a technology platform on which both private-sector scientists and entrepreneurs can make a profitable and socially beneficial investment.

Rice belongs to the genus *Oryza* and family Poaceae. The genus includes 24 species of which *O. sativa* and *O. glaberrima* are cultivated. *O. sativa* has three subspecies viz; Indica, Japonica, and Javanica.

1.3.1: Origin

De Candolle (1886) and Watt (1862) thought that South India was the place where cultivated rice is originated. Vavilov (1926) suggested that India and Burma should be the origin of the cultivated crop.

1.3.2: Distribution

It grows from the tropics to subtropical and warm temperate countries up to 40°S and 50°N of the equator. Most of the rice area lies between the equator and 40°N and 70° to 140° EL. The highest yields were recorded between 30° and 45° N of the equator. India, China, and Egypt lying between 21° to 30° N, the average yield ranges from 2.0 to 5.7 t/ha. The countries near the equator show an average yield of 0.8 to 1.4 T/Ha.

1.4: Area, Production, and Productivity

In terms of area and production, it is second to wheat. The maximum area under rice is in Asia (90%). Among the rice-growing countries, India has the largest area (431MHa) production (110.15 MT) productivity (2550 Kg/Ha) followed by China-Bangladesh-Thailand. The area, production, the productivity of rice for some of the important countries, and the world is tabulated below (2016).

Table 1.1: Area, Production, Productivity of Rice in various countries in 2017

S. No.	Country	Area (MHa)	Production (MT)	Productivity (Kg/Ha)
1	China	30747	212676	6917
2	India	43789	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	165249	769658	4602

Source: FAOSTAT (as of 08.01.2020).

1.5: Growth of rice in India

Table 1.2: Area, production, and Productivity of Rice in India from 2013-14 to 2017-18

S. No.	Years	Area (MHa)	Production (MT)			Productivity (Kg/Ha)
			Kharif	Rabi	Total	
1	2013-14	44.14	91.50	15.15	106.65	2416
2	2014-15	44.11	91.39	14.09	105.48	2391
3	2015-16	43.50	91.41	13.00	104.41	2400
4	2016-17	43.99	96.30	13.40	109.70	2494
5	2017-18	43.79	97.14	15.62	112.91	2578

Source: Agriculture Statistics at a glance-2018, India, Ministry of Agriculture, and farmers' welfare.

Table 1.3: State-wise Area, Production of rice (Major Rice producing states)

Area (MHa) , Production (MT)

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

Source: Agriculture Statistics at a glance- 2018, India.

Table 1.3.1: State-wise Productivity of rice (Major Rice producing states)

Productivity Kg/Ha

S.No	State	2016-2017		2017-2018	
		Kharif	Rabi	Kharif	Rabi
1	West Bengal	2598	3393	2771	3400
2	Uttar Pradesh	2293	2846	2280	2846
3	Punjab	3998	-	4366	
4	Odisha	2075	3531	1672	3439
5	Andhra Pradesh	3194	4440	3366	4720
6	Bihar	2462	2660	2429	1631
7	Chattishgarh	2101	-	1256	-
8	Tamilnadu	1610	1967	3830	4906
9	Assam	1746	2773	1959	2844
10	Telangana	2992	3169	2814	3587

Source: Agriculture Statistics at a glance-2018, India.**1.6: What is a hybrid?**

A hybrid is the product of a cross between two genetically distinct rice parents. When the right parents are selected, the hybrid will have both greater vigor and yield than either of the parents.

The advantages of hybrid rice are:

- Increased yields.
- Increased vigor (which makes them more competitive with weeds), and Increased resistance to diseases and insects.

The disadvantages of hybrid rice are:

- The seed is expensive and;
- Farmers cannot use their seed from one year to another.

To produce hybrids, you need:

1. A national seed production and distribution system.
2. A national quality assurance program.

National experts to oversee the production of lines and seed

Note: Despite early concerns, there are now hybrids with good grain quality.

1.6.1: How do you develop hybrid seed?

To produce hybrid seed, you need:

- A male sterile line – a rice variety without viable pollen. It is referred to as the female and accepts pollen from the male parent to produce the hybrid seed.
- A male (pollen) parent – a rice variety with normal reproduction function. It is referred to as the male parent to provide pollen for the female parent in the same fields.

Major hybrid seed management consideration includes:

- Synchronization of flowering – Both parents need to flower at the same time. Therefore, the planting dates of the two parents will often have to vary.
- Supplemental pollination – To help the spread of pollen ropes or sticks are often used to improve the spread of pollen from the male to the female line. GA increases the emergence of the female panicles from the sheath improving the ability of the female to accept pollen from the male.

1.7: Significance of the study

The coverage of the present study is confined to the Yadadri Bhuvanagiri district of Telangana. The study would be the following question *viz.* What is the extent of market share was achieved by Seed company? What are the constraints in the hybrid rice market? What are the strength and weaknesses and ways to improve the functioning of the seed companies in the study area?

The project title is **Market share & Farmer Perception of Hybrid Rice seed in Yadadri Bhuvavanagiri District of Telangana seed with Special Reference to JK Agri. Genetic Pvt. Ltd.** Was undertaken with the following specific objectives.

Objectives to study

1. To analyze the market share of Hybrid Rice seed.
2. Farmers & Dealer's perception in the adoption of different Hybrid rice seeds in the study area.
3. To Identify the constraints in Hybrid paddy seeds marketing.
4. To analyze SWOT (Strength, weakness, opportunity &Threat) of the JK Agri. Genetics Pvt. Ltd.

Limitation

1. The study was limited to only one company *i.e.*, JK Agri. Genetics Pvt. Ltd.
2. The framework for the project was only 9 weeks, which was not sufficient for such a study having so many dimensions.
3. The farmers and dealers do not provide an appropriate answer to some questions raised and therefore lacking information was collected from the company record.
4. The response of the survey was based on the memory of the respondent so there is the possibility of biases.

Chapter- II

PROFILE OF THE ORGANISATION

PROFILE OF THE ORGANISATION

JK Agri Genetics Ltd. (JKAL), is a leading seed company established in 1989 with its headquarters at Hyderabad, Andhra Pradesh (India). JK Agri Genetics Ltd. (JKAL), an erstwhile division of JK Tyre & Industries Ltd., JKAL is one of the pioneers in the Indian seed industry committed to serving the farming community. JKAL is engaged in research and development, production, processing, and marketing of Cotton, Maize, Paddy, Pearl Millet, Sorghum, Sunflower, Castor, Mustard, Wheat, Sorghum Sudan grass, Fodder beet, Tomato, Okra, Chilies, and other vegetable seeds.

JK Organization, founded over a hundred years ago is one of the leading private sector groups in India. Its member companies employing over 50,000 persons are engaged in the manufacture of a variety of products and in diverse fields of commerce both in India and abroad.

Ever since inception the division has been driven by continuous innovation in every field of activity like Management, Research, Production, Processing, Quality, and Marketing. This has resulted in the establishment of strong trust and brand equity of JK seeds amongst the consumers, channel members, suppliers, government officials, and others. The name **JK seeds** inspire prosperity to all its stakeholders. A group of committed, highly qualified, experienced, top-ranking professionals in the seed industry operate this Division under the guidance and supervision of Top Core Management.

2.1: The vision of the company is

To be one among Top 10 Seeds Companies and Top 5 Vegetable Seeds Companies in India by 2018-19.

2.2: The mission of the company is

- ❖ To be one of the most preferred seed brands in India.
- ❖ Offer value to our customers by providing them with high-quality products through innovation and commitment & develop a highly motivated team to enhance shareholder value.

2.3: Board of Directors of JK Agri Genetics Pvt. Ltd.

Table 2.1: Board of Director

Shri Bharat Hari Singhania	Chairman
Dr. Raghupati Singhania	Director
Shri Sanjay Kumar Khaitan	Director
Shri Sanjeev Kumar Jhunjhunwala	Director
Smt. Swati Singhania	Director
Shri. Abhimanyu Jhaver	Director
Shri. Ajay Srivastava	Director
Shri Amar Singh Mehta	Director
Shri Vikrampati Singhania	Managing Director
Dr. Gyanendra Shukla	President & Director

2.4: International Business of JK Seeds:

- South Asia Bangladesh, Pakistan, Sri Lanka, Indonesia, Thailand, Vietnam, Africa Egypt, Kenya, Ghana Mozambique, Mali, Nigeria, Sudan Guinea

2.4.1: Focus crops

Maize, Paddy, Pearl Millet, Sunflower, Sorghum, Okra Tomato, and Hot Pepper.

- Going global to serve more territories

2.4.2: Solid Fundamentals

- a large collection of Germplasm.
- High-Performance Hybrids.
- R&D with a global mandate.
- Registration trials in West Africa, ESA, South East Asia.
- GM technology In Cotton, Rice, and Maize.
- Efficient Sales Network.
- Association with International in Organizations.
- Talented Workforce.

2.5: Milestone

- **1989**
 - ✓ Established JK Agri Genetics, (A division of JK Industries Ltd) to develop high yielding varieties in various field crops, to boost agriculture productivity.
- **1990**
 - ✓ Started R&D activities in Jowar, Bajra & Maize crops.
- **1995**
 - ✓ Entered into a marketing agreement with RASI Seeds Pvt. Ltd. for marketing cotton hybrids across India.
 - ✓ Introduced an innovative farmer booking scheme, the first time in India.
- **1996**
 - ✓ Started crop breeding activities in cotton.
- **1997**
 - ✓ R&D Centre at Ravalkol was recognized by Dept. of Scientific & Industrial Research (DSIR) Govt. of India.
- **1999**
 - ✓ Established state of the art Biotech Research Laboratory. Launched versatile JK cotton hybrids, developed through in-house research. Full-fledged biotech R&D operations started. Entered into a collaborative research agreement with BREF BIOTECH, IIT Kharagpur for developing transgenic cotton hybrids.
- **2000**
 - ✓ Launched record-breaking high yielding rice hybrid JKRH 401. Entered into a collaborative research agreement with ICIRSAT for the development of high yielding sorghum and pearl millet hybrids.

- **2001**
 - ✓ Launched DNA mapping quality assurance process for parental seed.
- **2003**
 - ✓ JK Agri Genetics has become an independent company, “**JK Agri Genetics Ltd**” and is listed on the Bombay Stock Exchange (BSE).
- **2004**
 - ✓ Biotech R&D center was recognized by Dept. of Scientific & Industrial Research (DSIR), Govt. of India. Providing computer systems in the entire production center and implementing SAP package to get timely feedback on production activity. Introduced “BAR Coding” in cotton seed packing to eliminate human error.
- **2006**
 - ✓ Launched indigenously developed BT. Cotton hybrids in collaboration with BREF Biotech, IIT-Kharagpur. Entered into a collaborative agreement with NBRI, Lucknow to develop transgenic cotton hybrids. Involved in diversified activities of medicinal (herbal) and organic product business by name "NATEXT".
- **2007**
 - ✓ Entered into an agreement with KWS SAAT, GERMANY for sugar beet crop development in India signed an agreement for undertaking project on “Cotton fiber quality improvement program” with CSIR (NMITLI) with Govt. of India funding.
- **2009**
 - ✓ Signed agreement for undertaking project on “Cotton fiber quality improvement program” with CSIR (NMITLI) with Govt. of India funding. Entered into licensing agreement with MAHYCO Monsanto India Ltd for production & marketing of BG-II JK cotton hybrids.

- **2010**

- ✓ Established state of the art seed conditioning plant with the latest world-class equipment to take up processing, packing, and quality control operations, with a seasonal processing capacity of 15,000MT. Achieved group chairman's people management award for the year 2009-10.

- **2011**

- ✓ Established a processing facility at Kota, Rajasthan with a seasonal processing capacity of 3,000 MT.

2.6: Products of JK seeds

2.6.1: Field crops.

1. Cotton

JK PASS PASS, JKCH-1947, JK-DURGA, JKCH-99, JK-INDRA VAJRA, JKCH-226, JK-GOWRI, JK-ESHWAR, JK-VARUN, JKCH-666, JK-CHAMUNDHI, JKCH-8665, JKCH-0109, JK NAMO.

2. Paddy

RH10, JKRH401, JKRH2082, JKRH2062, JKRH2424, JKRH2067, JKRH3333, JK DHANYAREKHA, JKRH1220.

3. Bajra

JKBH-36, JKBH-778, JKBH-676, JKBH-26.

4. Maize

JKMH502, SURABHIGOLD, JKMH-1001, JKUJALA, JKMH-8008.

5. Jawar

JKSH22, JK JYOTI, JKSH-234.

6. Sunflower

JK CHITRA, JK SURYA.

7. Castor

JKSARDAR, JK SAMRAT, JK KIRAN.

8. Mustard

JKM52, JK SURAJ, JK KIRTI.

9. Wheat

JK VAIBHAV, JK VIJAY, JK ADITYA, JKWH15

10. Red gram

JK CHAMPION, JK SANIA, JK SWEETY

11. Soyabean

JK KRANTI, JK MOTI.

2.6.2: Vegetables

- 1. Tomato** - JKTH-811, JKDESHI, JK AKSHAY, JKTH-5419
- 2. Okra** - JKOH-7315, JKOH-1060, JKOH-045.
- 3. Chilli** - JKHPH-178, JK NAINA, JKHPH-207
- 4. Bottle gourd** - JK UTTARA, JK-9126.
- 5. Watermelon** - JKWMH-9W7(007), JK LEKHA, JK VIMAL.
- 6. Radish** - JK SWETHA.
- 7. Cabbage** - JK GREENWONDER, JK OXFORD.
- 8. Sweet corn** - JK MADHU, JKATIMADHUR.
- 9. Cauliflower** - JK SONIO.
- 10. Brinjal** - JK-8031, JK KAMINI, JK-8034.

2.6.3 Fodder crops

- 1. Fodder beet** - JK KUBER
- 2. Sorghum** - JKSSG01, JKSS-0017

2.7: The Research and Development

2.7.1: Research Objectives

The Plant Breeding R&D objectives are as follows:

Give more emphasis on development and identification of full maturity hybrids in Maize, medium and mid-early maturity in rice, medium maturity in

bajra, early and medium maturity in wheat high oil content in mustard, and big boll size of cotton in Central & South zones. Fast and objective oriented inbred line development in all crops resulting in superior proprietary hybrids. To incorporate downy mildew resistance in Bajra and BLB & Blast resistance in rice, Bollworm and CLCUV resistance in cotton, downy mildew and stalk rot resistance in maize, rust resistance in mustard and wheat. Strengthening Germplasm collection in all mandate crops. Maintenance Breeding, Breeder Seed Production, and Supply. Standardizing production techniques of new pipeline hybrids.

2.8: Collaboration

2.8.1: National Research Collaborations

- ❖ Two MOUs with BSSKV, Dapoli for Gambiaca Cytoplasm of rice, and the hybrid JKRH2005.
- ❖ MOU with PDKV Akola for collaboration on cotton hybrid development.
- ❖ Member of NMITLI project of CSIR for rice and cotton hybrids.
- ❖ Two MOUs with DRMR for mustard breeding and NRCCR-2.
- ❖ MOU with DRR for rice hybrids DRRH-2 and DRRH-3.
- ❖ MOU with CCSHAU for two wheat varieties.
- ❖ MOU with IARI for extra-long aromatic rice hybrid RH-10.
- ❖ MOU with Intelli Biotechnology for Dihaploid production at Rice.
- ❖ MOU with NDDB for mustard hybrid DMH-1 (in the process).

2.8.2: International Research Collaborations

- ❖ Founder Member of ICRISAT's Hybrid Parent Research Consortium.
- ❖ Founder Member of IRRI's Hybrid Rice Development Consortium.
- ❖ Collaboration with ICRISAT on HOPE and Heat Tolerance in Pearl Millet.
- ❖ MOU with Seed Vision, Australia for collaboration on sunflower breeding.
- ❖ Collaboration with the STRASA project of IRRI for stress tolerance in rice.
- ❖ Collaboration with NCSRC, Thailand for maize breeding.

2.9: Future focus/prospect

All our Breeding R&D projects are long term projects with a regular flow of superior products in every mandate crop. Our future focus is on the application of Biotechnology for Trait Introgression, Molecular Tools such as Marker Assisted Breeding, the fast development of inbred lines by using double haploidy, and the development of climate-resilient genotypes.

2.10: Achievements

The achievements of the breeding R&D team are reflected in the products developed by us and the products in the pipeline. In all the mandate crops, our pipeline is bubbling with new and superior products that are subjected to testing and farmer's fields. The scientists of JK Agri. Genetics is committed to increasing the profitability of the farmers by developing excellent products suitable for various agro-climatic regions.

2.11: Infrastructure

2.11.1:Seed production

JKAL has a wide network of seed producers in all the agro-climatic zones of India consisting of about 15,000 loyal farmers. JKAL supervises the seed production in great detail by providing up-to-date crop management materials and training to the farmers. Such a large operation is managed by advanced communication technologies powered by SAP. Our network of farmers, managers combined with an IT network ensures a steady supply of around a hundred seed products from twenty-six different crop plants.

2.11.2:Processing facilities

The seeds are processed at five different locations in the country. High capacity processing units are equipped with modern technologies such as Moistometer, Creator, Online QC.

2.11.3:Quality

The Quality Control Laboratory carries out Sampling, Physical purity, Genetic Purity, Germination, Vigour, Moisture content, etc. following the International Seed Testing Rules published by the International Seed Testing Association (ISTA). The genetic purity of seeds is assessed by using

techniques such as DNA fingerprinting involving AFLP, SSR, and ISSR markers. Advanced methods, as well as instruments such as Q2 machine (single seed vigor analysis), are being used.

2.11.4:Seed conditioning

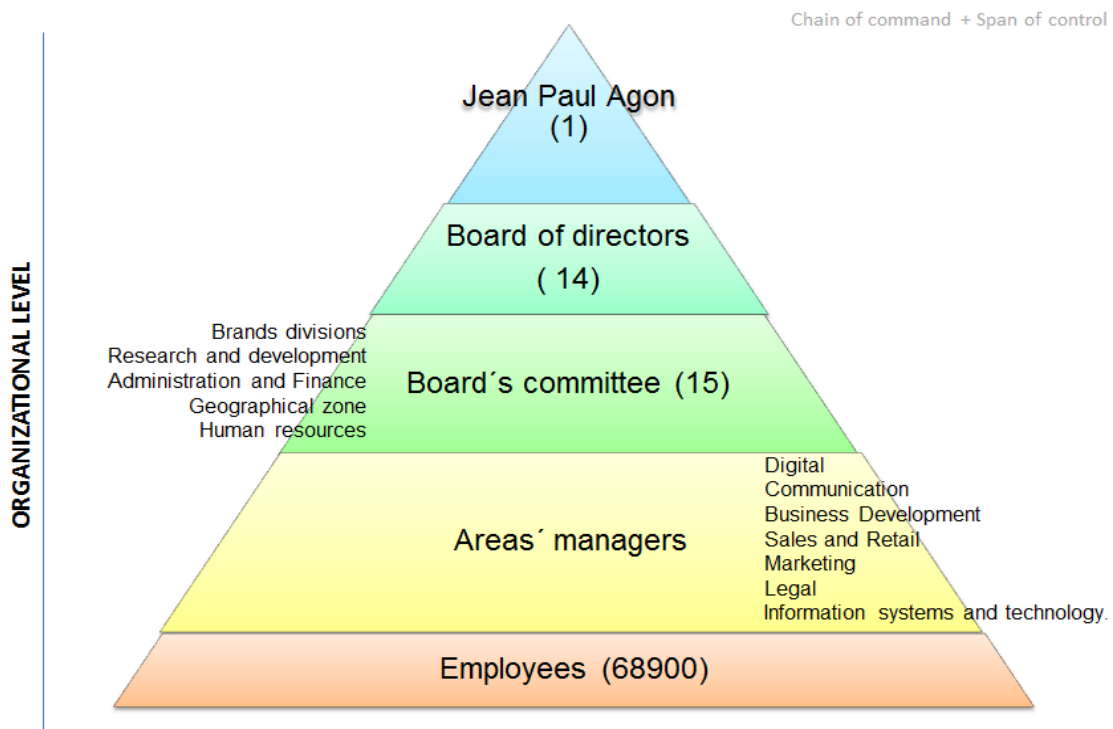
In seed processing, the physical parameters are generally improved. The seed is conditioned to retain its inherent quality parameters (Germination) and improve its physical parameters. Undersized and light seeds are removed. The moisture is brought to the right level.

2.11.5: Seed packing

The seed packing is carried out considering the following aspects.

Seed rules (quality of seed required for planting in an acre). Seed storability. Present ability in the market. Usage of cloth bags, poly pouches, HDPE oven socks, etc. Labeling as per the seed rules. Packaging Act (Weight & Measures). Consumer Protection Act Labeling of every seed packet is compulsory under the seed Act. The label on the seed packet contains the information about the parameters, the lot number, and the unique label number. Involving AFLP, SSR, and ISSR markers. Advanced methods, as well as instruments such as Q2 machine (single seed vigor analysis), are being used.

2.1: Organization structure



Chapter - III
PROFILE OF THE STUDY AREA

PROFILE OF THE STUDY AREA

The knowledge of the general characteristics of the study area is essential for understanding the feature of the study area. This will facilitate the discussion concerning similarities and variations in land use patterns, rainfall, cropping pattern, etc. This also enlightens the socio-economic conditions of the area selected for the study.

3.1: General characteristics of the district

The Yadadri Bhuvanagir is a newly formed district in Telangana. The district shares boundaries with Nalgonda, Suryapet, Warangal Urban, Siddipet, Medchal, and Shamshabad districts comprises 16 Blocks and 2 revenue divisions – Bhongir and Choutuppal. The district headquarters is located at Bhongir town which a prominent business center in the region the biggest and the most popular pilgrim center in Telangana, Yadadri is a district of historical and religious importance. The district boasts of Jain Temple at Kolanpak and Bhogir Fort. This region is the birthplace of Andhra Mahasabhalu, which ushered in the Indian freedom Movement in the Nizam state. Bhoodhan Pochampally in the district is the place where the social activist Vinobha Bhave's Bhoodhan movement was initiated. The textile industry is also one of the focal points of the district. Pochampally handloom products are of national and international repute. Small and medium scale industries situated in and around Bibinagar and Bhongir are the sources of employment to many locals. Choutuppal, Yadagirigutta, Aler, Mother, and Ramannapet are the other towns of significance in the district.

3.2: Location & Geographical Area of Yadadri Bhuvanagiri district

The Yadadri Bhuvanagiri district lies between the northern latitudes of 17° 31' and eastern longitudes of 78° 53'. The altitude of the district varies from 436 ft. above the mean sea level. The district accounts population with 770833 and comprising with Telangana was 3,50,03,674 as per the 2011 population census, while in the area the districts spread 3464 Sq. Kms., which account for 2.76 percent of the total area of the state.

3.3: The climate of Yadadri Bhuvavanagiri district

The Bhongir lies on 436 m above sea level. The climate in Bhuvavanagiri is referred to as a local steppe climate. There was not much rainfall in Bhuvavanagiri all year long. The average annual temperature is 27.0 °C | 80.6 °F in Bhuvavanagiri. Precipitation here is about 748 mm.

3.4: Soil

Red soils 85%, Black Soils 12%, Alluvial soils 1%

3.5: The economy of Yadadri Bhuvanagiri district

Economically, Yadadri was dependent on agriculture, Industries were developing in the area. The major cash crops of Yadadri district rice, Cotton. The district was known for pochampalle sarees and Yadagirigutta.

Table 3.1: General Information of Yadadri Buvanagiri district.

S. No	Particulars	Content
1	Geographical area	3464 Sq. Kms
2	Forest Land	116.97 Sq. Kms
3	Latitude	17°29'55.1"N
4	Longitude	78°53'16.5"E
5	Population	770833
6	ST Population	49947 (6.48%)
7	SC Population	144455 (18.74 %)
8	Male	390492 (50.66%)
9	Female	380341 (49.34%)
10	Population Density	237 /Sq. Kms
11	Population growth rate per annum	22.85 %
12	Sex ratio	944
13	Literacy Percent	65.53 %
14	Agricultural Labourers	154427
15	Gram Panchayat	421
16	Tehsil	17
17	Revenue Division	2
18	Revenue Villages	321

Source: Department of Agriculture Telangana, open portal, Yadadri Bhongir

Figure 3.1: Map of Yadadri Bhuvanagiri district.



Source: <https://yadadri.telangana.gov.in/map-of-district/>

3.6: Landholding

The majority of the farmers in the Yadadri Bhuvanagiri district belong to the small, marginal, and large size of groups. The operational landholding under different size groups of farmers are given in (table 3.3)

Table 3.2: Operational landholding under different size groups.

S.No	Size group	Landholding (Ha)	No.of farmers	Percentage of the farmer
1	Marginal	<1 Ha.	98860	57.56
2	Small	1-2 Ha.	45284	26.37
3	Semi-Medium	2-4 Ha	20905	12.17
4	Medium	4-10 Ha	6168	3.60
5	Large	>10 Ha	530	0.31
	Total		171747	99.98 %

Source: District at a glance- Yadadri Bhuvanagiri, 2019.

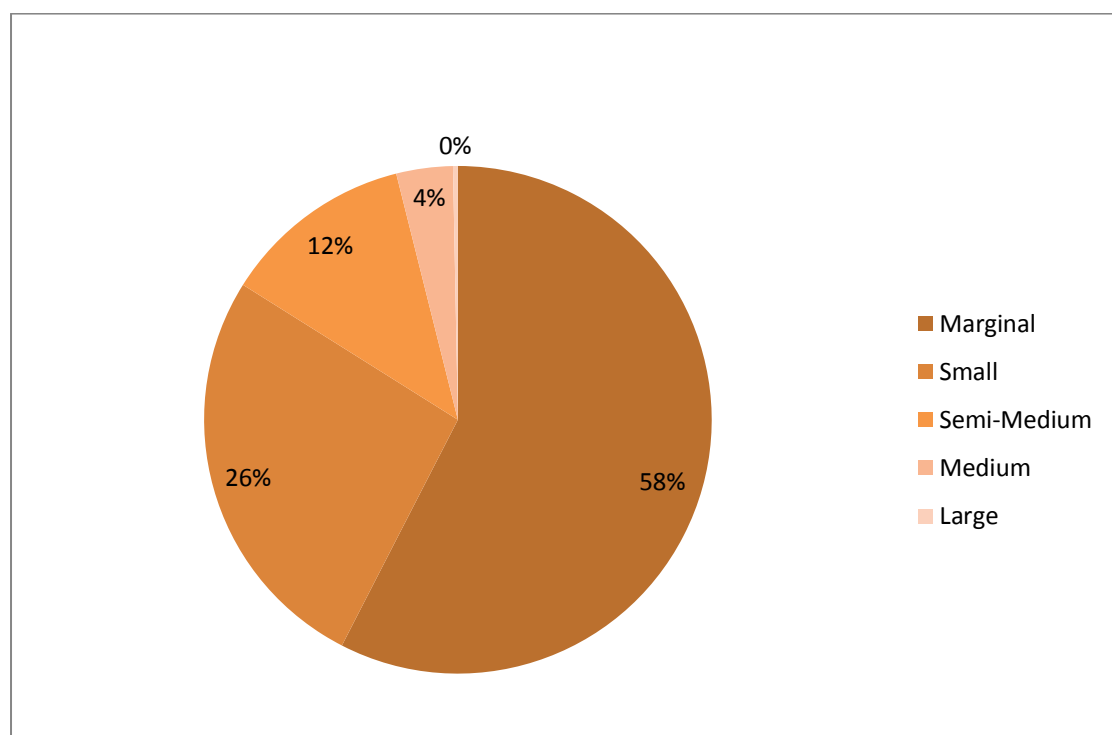


Figure: 3.2: Percentage of landholding of farmers.

Figure 3.2 represents that most farmers in the Yadadri Bhuvanagiri district belong to a marginal size which contributes to about 57.56% of the total farmers and followed by small (26.37%) semi-medium (12.17%) and medium (3.60%) large (0.31%).

3.7: Source wise irrigated area

Table 3.3: Source wise irrigated area and percentage.

S.No	Name of source	Irrigated area (Ha)	Percentage (%)
1	Project Canals	416000	13.84
2	Tanks	253000	8.42
3	Tube well / Borewell	2243000	74.64
4	Other Sources	93000	3.09
	TOTAL	3005000	100

Source: Department of Agriculture, Telangana, open portal –Yadadri Bhuvanagiri (2016-2017).

The main source of irrigation in the district was the Musi river and its left and right canal, table, represents that the source of irrigation is canals, Tanks, bore wells/Tube wells, etc. Wells are very popular in the district, contributing nearly 74.642 percentage of net irrigated area and followed by Project Canal (13.84%).

3.8: Land use pattern

Table 3.4: Land use pattern of Yadadri Bhuvanagiri district (2016-2017)

S.No	Particular	Area (Ha)	Percent (%)
1	Total Geographical area	346400	100
2	Total forest area	11697	3.78
3	Gross cropped area	189544	54.72
4	Net cropped area	134199	38.74
5	The area under Kharif crop (Actual area is sown)	75200.83	21.70
6	The area under Kharif crop (Normal area is sown)	88337.50	25.50
7	The area under rabi crop (Actual area is sown)	89920	25.99
8	The area under rabi crop (Normal area is sown)	58155.60	16.78
9	The area under fodder crop	380.30	0.11
10	Gross Irrigated area	97811	49.04
11	Net Irrigated area	57753	33.39
12	Cropping intensity	141.24%	

Source: Department of Agriculture, Telangana, Open portal, Yadadri Bhuvanagiri.

1 Sq. Kms = 100 Ha, 1Ha = 2.4 acre,

Cropping intensity= Gross cropped area/ Net cropped area×100

Table 3.5 represents that the geographical area of the Yadadri district was 346400 hectares. The Gross cropped area of the district was 189544 hectares and the net cultivated area 134199 hectares which were 54.72 % and 38.74 % respectively of the total geographical area. Cropping intensity was 141.24%.

3.9: Cropping pattern

Cropping pattern refers to the proportion of land under the cultivation of different crops at different points of time. This indicates the time and arrangement of crops in a land area. The cropping pattern is determined by rainfall, temperature, climate, and technology, and soil type.

Generally, the cropping pattern followed in the Yadadri Bhuvanagiri district are:

- Paddy follows Paddy
- Paddy follows Jowar/Maize follows Green gram/Black gram
- Redgram follows green Sesamum.
- Maize follows Paddy follows Green gram/black gram.
- Maize follows Jowar.

Table 3.5: Cropping pattern of Yadadri Bhuvanagiri (2016-2017)

I. Kharif Season

S.No	Particular	Area (Ha)	Percentage (%)
	Cereals	Kharif	
1	Paddy	25287	84.329
2	Maize	3700	12.339
3	Bajra	6	0.020
4	Jowar	993	3.311
	TOTAL	29986	100
	Pulses	Kharif	
1	Arhar	9571	91.93
2	Green gram	840	8.068
	TOTAL	10411	100
	Oil Seeds	Kharif	
1	Groundnut	207	16.720
2	Sesamum	952	76.898
3	Soyabean	79	6.381
	TOTAL	1238	100
	Other Crops	Kharif	
1	Cotton	53923	78.0203
2	Sugarcane	646	0.9346
3	Castor	63	0.0911
4	Chilies	93	0.1345
5	Other food crops	14389	20.619
	TOTAL	69114	100

II. Rabi Season

S.No.	Crop	Area (Ha)	Percentage (%)
	Cereals	Rabi	
1	Paddy	42864	99.604
2	Jowar	116	0.269
3	Maize	54	0.125
	Total	43034	
	Fodder crops	Rabi	
1	Fooder Jowar	512	100
	Total	512	100
	Pulses	Rabi	
1	Horse Gram	158	40.721
2	Black Gram	117	30.154
3	Bengal Gram	113	29.123
	Total	388	100
	Oilseeds	Rabi	
1	Groundnut	67	100
	Total	67	100
	Other crops	Rabi	
1	Coriander	63	0.6075
2	Vegetable	607	5.8534
3	Chilies	100	0.9643
4	Other Non-food crops	240	2.3143
5	Other Food crops	9422	90.8582
	TOTAL	10370	
	Gross Cropped Area	189544	
	Net Cropped Area	134199	
	Cropping Intensity	141.24%	

Source: Department of Agriculture, Telangana open portal, Yadadri Bhongir.

Total production is 200.96 Lakh tons. The highest area was under Paddy with 18.28 LHa and production with 65.99 Lakh tonnes. In the pulse crop highest area is under Arhar with 3.87 LHa and the least under Black Gram with 0.52 LHa. But Productivity of Bengal Gram is much higher than other pulses crop (1299 Kg/ha). In oilseeds, the highest area was under Soyabean with 2.77 LHa and the least was Sesamum with 0.21 LHa, but productivity was highest under Groundnut with 2066 Kg/Ha. In the case of cash crops, the highest area was under cotton with 14.09 LHa and the least is Turmeric with 0.51 LHa.

Table 3.6: Production and productivity (Kharif, Rabi) of principal crops in Yadadri Bhuvanagiri district of Telangana (2016-2017)

S.NO.	Crop	Total production (Lakh Tonnes)	Productivity (Kg/Ha)
1	Paddy	65.99	3609
2	Maize	28.82	3595
3	Bajra	0.15	869
4	Jowar	0.88	977
5	Total Major Millets	29.86	3283
6	Arhar	2.62	677
7	Black gram	0.43	820
8	Green gram	0.92	632
9	Bengal Gram	1.32	1299
10	Groundnut	3.42	2047
11	Castor	0.26	590
12	Sesamum	0.15	699
13	Soyabean	3.22	1166
14	Cotton	34.44	416
15	Sugarcane	20.6	79157
16	Chilies	4.83	3884
17	Turmeric	3.05	6033

Source: Department of Agriculture, Telangana open portal

Chapter-IV
METHODS AND MATERIAL

METHODS AND MATERIAL

The methodology adopted for the selection of study area, sample design, sample selection, etc. are discussed below. The study was based on primary and secondary data. The Primary data was collected from Wholesalers as well as retailers and farmers through a pre-tested interview schedule, and Secondary data was collected from the district Department of Agriculture, district open portal, and statistical Department, and various websites.

The methodology employed has been presented under the following subheads

1. The Study area.
2. Sampling.
3. Method of data collection.
4. Method of analysis.

4.1: Study area

The present study was confined to the Yadadri Bhuvanagiri district of Telangana since the largest area under Paddy cultivation is confined to this district compare to other districts of the State. Due to the largest area under Paddy cultivation, the demand for seed is high and the market is also huge for seed, and there are many companies and Govt organizations as well as co-operative societies supplying seeds to the farmers.

4.2: Sampling Design

4.2.1: Selection of village

The Yadadri Bhuvanagiri district of Telangana is having 16 Mandals but the present study was confined to four Mandals, namely Yadadri Bhuvanagiri, Atmakur, Shaligouraram, and Ramannapeta..JK AGRI GENETICS Pvt Ltd assigned these Mandals of Yadadri Bhuvanagiri district for detailed study with the help of a questionnaire, where the paddy crop was cultivated by the farmers. Thereafter, 5 villages were selected from each

Mandal, Thus a total of 20 villages were selected for the detailed study of the Yadadri Bhuvanagiri district.

Table 4.1: Number of selected villages, blocks, and farmers

S.No.	Block	Villages	No. of Selected Farmers
1	Yadadri Bhuvanagiri	Bhuvanagiri	10
		Surepalle	10
		Bollepalle	10
		Anajipur	10
		Yerramballe	10
2	Shaligouraram	Lingodam	10
		Shaligouraram	10
		Ramagiri	10
		Gurajala	10
		Adloor	10
3	Ramannapet	Indrapalanagaram	10
		Munipampla	10
		Kommaygudem	10
		Dubbaka	10
		Bogaram	10
4	Atmakur	Thimmapuram	10
		Atmakuru	10
		Koratikal	10
		Siddapuram	10
		Lingarajapalle	10

Source: Based on primary data collected from Farmers

4.2.2: Selection of the farmer

After the selection of villages, a list of Paddy growers was prepared and further categorized into three groups based on the size of landholding. From each Mandal, 50 farmers were selected. Thus, a total of 200 farmers was selected from 20 villages of 4 Mandals. Out of the total 200 farmers, further, it was categorized into namely small (1 to 2 Ha), semi-medium (2-4 Ha), medium (4-10 Ha), and large (above 10 Ha).

Table 4.2: Classification of farmers according to the size of landholding

S.No.	Particular	No. of farmers	Percentage share	The average size of landholding (Ha)
1	Small (Up to 2 Ha)	68	34	1.24
2	Semi-Medium (2 to 4 Ha)	100	50	2.51
3	Medium (4-10 Ha)	32	16	3.93
4	Large (>10 Ha)	0	0	0
	Total	200	100	

Source: Primary data from sample farmers.

Table 4.2 represents that In Yadadri Bhuvanagiri district (4 Mandals) most of the farmers are Medium-scale farmers with 50% followed by small (34%) and large (16%) scale farmers.

4.2.3: Selection of the dealer (Wholesalers)

Dealers were selected based on their performance in the study area *i.e.*, Demand and supply in terms of quantity of the hybrid rice seed, Farmers Trust, Kind of product dealership they are handling (Different company product) from Yadadri district. The names of selected dealers are given in (table 4.3).

Table 4.3: Major distributor in Yadadri Bhuvanagiri.

S.NO.	Distributer	Variety of seed (In Kg)			Percentage share		
		Hybrid	OP	Research	Hybrid	OP	Research
1	R.V.R Seeds and pesticides	11700	65750	0	7.59	22.71	0
2	Sri Vasavi Traders	4200	31500	0	2.72	10.88	0
3	Ranga Krishnayya Traders	20400	71500	19700	13.23	24.69	62.14
4	Praveen Kumar Traders	58800	50000	4000	38.15	17.27	12.61
5	Ranga Chandra Shekar fertilizers & co	59000	70750	8000	38.28	24.43	25.23
	Total	154100	289500	31700	100	100	100

* Jk seeds distributor

Note: Data collected from Mandal H.Q and its 4 Mandals.

Table 4.3 represents that JK seeds have a specific distributor in Bhuvanagiri to supply their product throughout the Mandal. Products were supplied through their employee to direct distributors from the godown, then retailers to the farmer. In Yadadri Bhuvanagiri Mandal **Ranga Chandrashekar fertilizer & co** was the largest dealer in Hybrid paddy seed distribution *i.e.*, **38.28%** market share, in the case of OP paddy and Research paddy seeds **Ranga Krishannyya Traders** was the largest distributor in Yadadri Bhuvanagiri *i.e.*, 24.69%, 62.14% respectively.

Overall scenario OP paddy has the Highest market with 289500 Kg than Hybrid (154100Kg) and research (31700 Kg).

Table 4.3.1: Major distributor in Shaligouraram Mandal.

S.No.	Distributor	Variety of seed (In Kg)			Percentage share		
		Hybrid	OP	Research	Hybrid	OP	Research
1	Agro Rythu sevakendra	7200	75450	2500	26.66	17.59	2.83
2*	Ramalingeswara seeds & fertilizers	1800	85750	7000	6.67	19.99	7.92
3	Rajeswari fertilizers & Seeds	8400	75750	8400	31.11	17.66	9.50
4	Sri Sainath seeds & Fertilizers	3600	55000	28500	13.33	12.82	32.24
5	Sri Sai Venkateswara Fertilizers & Seeds	3000	65000	33000	11.11	15.15	37.33
6	Bhagya Laxmi Traders	3000	72000	9000	11.11	16.79	10.18
	Total	27000	428950	88400	100	100	100

Source: Based on primary data collected from Dealers

*** Jk seeds distributor**

Table 4.3.1 represents that In Shaligouraram Mandal **Agro Rythu Seva Kendra** was the largest dealer in Hybrid paddy seed distribution *i.e.*, **26.67%** market share, in case of OP paddy seeds **Ramalingeswara seeds & fertilizers** was the large distributor *i.e.*, **19.99%** market share. In the case of Research paddy **Sri sai, Venkateswara fertilizers & seeds** were the largest distributors *i.e.*, **37.33%** market share.

Overall scenario OP paddy has the Highest market with 428950 Kg than Hybrid (27000Kg) and research (88400 Kg).

Table 4.3.2: Major distributor in Ramannapeta Mandal.

S.NO.	Distributer	Variety of seed (In Kg)			Percentage share		
		Hybrid	OP	Research	Hybrid	OP	Research
1	Mallikarjuna Seeds and fertilizers	8200	20500	8500	37.27	9.36	39.53
2	Sri Lakshmi Narasimha fertilizers & pesticides	4500	59500	7500	20.45	27.17	34.89
3	Mana Gromor fertilizers and seeds	2700	70000	3500	12.27	31.96	16.28
4	Agro farmer service center	2100	42000	0	9.55	19.19	0
5	Sharadha Traders, Munipampla	4500	27000	2000	20.45	12.33	9.30
	Total	22000	219000	21500	100	100	100

Source: Based on primary data collected from Dealers

Table 4.3.2 represents that In Ramannapeta Mandal **Mallikarjuna seeds and fertilizers** were the largest dealer in Hybrid paddy seed distribution *i.e.*, **37.27%** market share, in the case of OP paddy seeds **Mana Gromor seeds& fertilizers** was the large distributor *i.e.*, **31.96%** market share. In the case of Research, paddy **Mallikarjuna seeds and fertilizer** was the largest distributor *i.e.*,**39.53%** market share.

Overall scenario OP paddy has the Highest market with 219000 Kg than Hybrid(2200Kg) and research (21500 Kg).

Table 4.3.3: Major distributor in Atmakur Mandal.

S.NO.	Distributor	Variety of seed (In Kg)			Percentage share		
		Hybrid	OP	Research	Hybrid	OP	Research
1	Sri Mallikarjuna Traders	2400	14500	0	12.80	9.01	0
2	Mana GROMOR	3300	11100	300	17.60	6.90	4.23
3	Ranga Chandrashekar fertilizer and seeds	6900	93000	2000	36.80	57.82	28.18
4	Sivasai Traders,	3900	22500	300	20.80	13.99	4.23
5	Thirumala Fertilizers, pesticides & Seeds	2250	19750	4500	112	12.28	63.38
	Total	18750	160850	7100	100%	100%	100%

Source: Based on primary data collected from Dealers

Table 4.3.3 represents that In Atmakur Mandal, **Ranga Chandrasekhar fertilizer &co** is the largest dealer in Hybrid Paddy, OP seed distribution and having market share *i.e.*, **36.80%**, **57.817%** respectively, in the case of Research paddy Tirumala Fertilizers, pesticides & Seeds is the largest distributor *i.e.*, 63.380% market share.

Overall scenario OP paddy is having Highest market with 160850 Kg than Hybrid (18750 Kg) and research (7100 Kg)

4.3: Period of study

The project period was from February to April 2020.

4.4: Method of the data collection

To justify specific objective, various type of primary data were collected from sample farmers regarding their basic information like cropping pattern, the seed used and why they are interested in a particular Company, a farmer whom to consult for purchasing seed, availability of the product in the market,

quality and quantity used by the farmer, farmers needs, etc. and regarding distributor factors like quantity sold price of the product, etc. The Company-wise quantity of seed sold in the Yadadri Bhuvanagiri district was also collected from the distributor. Based on available information top five companies were determined by calculating the percentage share to total sales.

4.4.1: Primary Data

Primary data was collected from sample farmers and distributors using a well-defined and pre-tested schedule through personal interviews and an online questionnaire. The primary data pertained to the year 2019-2020.

4.4.2: Secondary data

The secondary data were collected from the district department of agriculture and District planning and statistical office, Yadadri Bhuvanagiri, and Telangana open portal various web sites.

Tools of analysis

The collected data were analyzed by using simple statistical tools such as percentage analysis, factor analysis to make meaningful inferences.

4.5: Method of analysis

Both primary and secondary sources of data have been used while preparing the report. For the analysis of available data, simple arithmetic tools such as ratio, percentage, average have been used for evaluating market share and impact assessment. The collected data were analyzed systematically and interpreted it with table, pictorial representation such as bar charts, pie charts, etc. to know the interventions of sales. Based on the results conclusions and inferences were made.

4.6: Scope of the Study

The seed industry in India is going through a rapid change. Unlike in past now there are varieties of good products in the market.

- The study will help to know the consumer behaviour towards the use of hybrid seeds of paddy.

- It is very important for the Company to study the trend in the hybrid paddy seed segment and awareness and satisfaction level of farmers about the hybrid paddy seed and to know the market position with their competitors.

4.7: Limitations

The project was done with all the possible accuracy and honesty. However, there were some limitations due to which there may be some deviations in findings. These are:

- The survey and research have been done based on whatever information gets from the farmers and dealers.
- Some dealers avoid giving sufficient information related to business fearing loss of trust by the Company and any unusual action taken by the Company on them.
- The project work to be complete within 2 months but because of Pandemic disease Covid-19, it was completed early.

Chapter – V
DATA FINDING AND PRESENTATION

DATA FINDING AND PRESENTATION

This chapter deals with the analysis of the data collected in the field survey of the area on market share and farmer perception in Yadadri Bhuvanagiri district. Based on the analysis and interpretation of data, results and conclusions have been drawn considering the objectives of the study under the following heads.

- Overall market share of hybrid Paddy seed by major companies in Yadadri Bhuvanagiri district.
- Farmer's perceptions of the use of hybrid rice seed in the study area.
- Dealer's perceptions of hybrid Paddy seed in the study area.
- The constraint of the marketing of hybrid rice seed in the study area.
- Promotional activities to be adopted by JK seeds Agri.pvt.ltd.in
- SWOT analysis.

5.1: Market share

Market share is the proportion of market accounted for a specific entity. "Market share is the percent of total sales in an industry generated by a particular company. Market share is calculated by taking the company's sales over the period and dividing it by the total sales of the industry over the same period. This metric is used to give a general idea of the size of a company about its market and its competitors. In this section, the effort has been made to estimate the market share of different companies which are engaged in the Yadadri Bhuvanagiri district. For the estimation of market share, the quantity sales and price of the product (Rs) by the major company were tabulated. The overall estimated market share of hybrid Paddy seed of major players in Yadadri Bhuvanagiri district given in the following table.

Table 5.1: Market share of different Hybrid Rice seed companies.

S.No	Brand Name	Quantity supply (In Kg)	Market share	Price per Packet (3 Kgs)	Price per (Kgs)
1	Bio seed	117600	53.00	822.22	274.07
2	Kaveri	30300	13.66	833.75	277.92
3	TATA	30000	13.53	800	266.67
4	Rasi	22000	9.92	825	275
5	VNR	12000	5.41	887.50	295.84
6	JK seed	1900	0.86	816.66	272.22
7	Aditya 2727	1500	0.68	800	266.66
8	Mahendra	1200	0.55	800	266.66
9	LG.93.01	1200	0.55	800	266.66
10	Siri	1200	0.55	800	266.66
11	Ajith 003	1200	0.55	800	266.66
12	Ganga Kaveri	1000	0.46	800	266.66
13	Mahyco	750	0.34	800	266.66
	TOTAL	221850	100%		

Note: Based on primary data collected from Dealers.

Table 5.1 represents that, Bio- seed company reported the highest market share with 53%, among all the seed companies followed by Kaveri (13.66%), TATA (13.53%), Rasi (9.92%), and VNR Seeds (5.41%). The Jk seeds reported 6th rank among all companies with 0.86% market share.

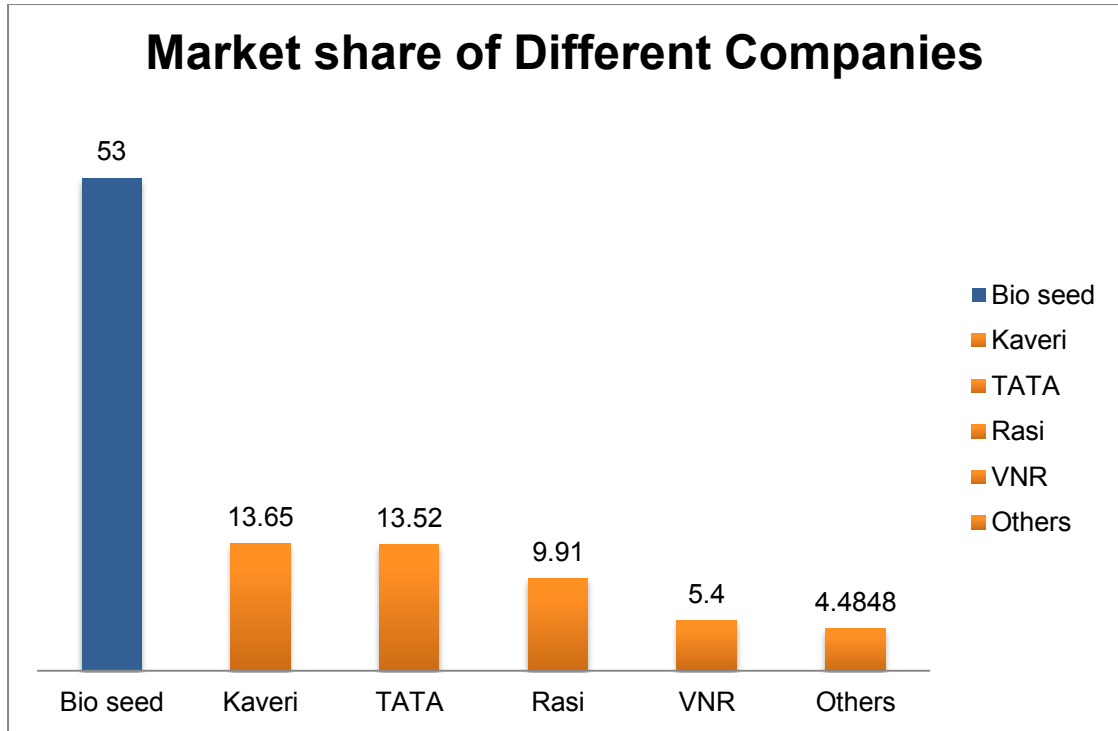


Figure 5.1.: Hybrid paddy market share in Yadadri Bhuvanagiri district

Figure 5.1.1 represents that the highest quantity sold in Bio-Seed and the low quantity sold in other varieties which introduced newly in the market.

Table 5.2: Market share of Hybrid seed compares to OP and research paddy in the study area.

S. No	Particular	Quantity in Kgs		
		Hybrid	OP	Research
1	Bhuvanagiri	154100	280750	31700
2	Ramannapeta	22000	219000	21500
3	Atmakur	18750	160850	7100
4	Shaligouraram	27000	428950	76400
	Total	221850	1089550	136700

Source: Based on primary data collected from Dealers

Table 5.2 represents that in the study area OP paddy market share was high as compared to hybrid paddy and research paddy seed.

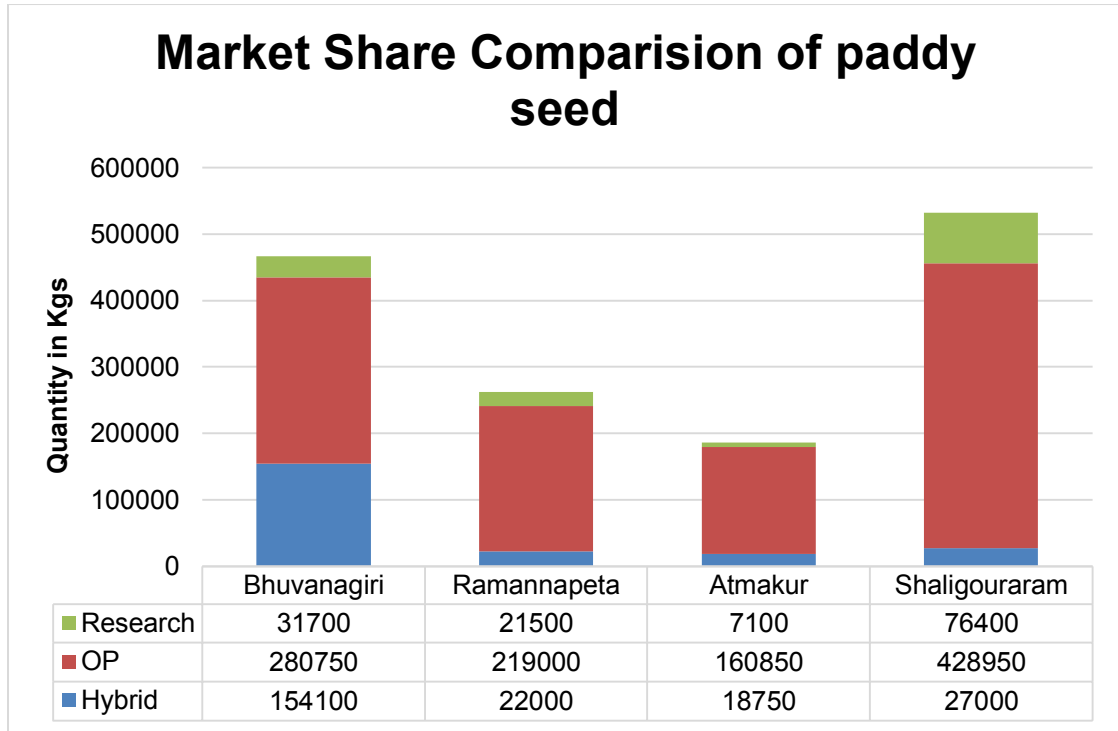


Figure 5.2: Market share of Hybrid, OP, Research paddy in the four Mandals.

5.2: Based on landholding capability and farmer need use of hybrid Paddy seed is as follows.

Table 5.3: Preference given by the farmers while purchasing the seed.

S.No.	Farmer preferences	Atmakur	Ramannapeta	Shaligouraram	Bhuvanagiri	Total
1	High Yield	50	46	50	48	194
2	Diseases and Pest resistance	28	48	30	30	136
3	Lodging Resistance	25	27	18	28	98
4	Non-Shedding	20	28	24	19	91

Source: Based on primary data collected from Dealers.

Note: Each of the farmers mentioned above four parameters.

According to their size of the firm and farmers need Table 5.2 shows that the maximum number of a farmer (194) purchased the seed, based on Yield of the particular variety because of high yield they will get good income.

The second parameter preferred by the farmers is Disease and pest resistance (136) because in the study area most of the common diseases and pests are Blast (*Pyricularia oryzae*), Sheath blight (*Rhizoctonia solani*), False smut (*Ustilagoidea virens*), Bacterial leaf blight (*Xanthomonas oryzae*), Brown Plant Hopper (*Nilaparvata lugens*), Stemborer (*Sciropophaga incertulas*), Leaf folder (*Cnaphalocrocis mendialis*) so farmers need such type of seed which is having a disease and pest resistance. Another factor mainly mentioned by farmers was Lodging resistance (98) because in Yadadri Bhuvanagiri district heavy winds damaging the well-established plants.

Table 5.4: Constraints faced by sample size in the adoption of Rice seed in the study area.

S. No	Particular	Size of Landholding			Total
		Small	Medium	Large	
1	Lack of credit facility	134	62	4	200
2	Lack of irrigation	102	78	20	200
3	Disease and pest	53	63	84	200
4	Lack of Knowledge	128	41	21	200
5	Lack of awareness	149	33	18	200

Source: Primary data collected from sample farmers.

Table 5.3 represents that based on their size of firm and farmers need, maximum no of farmers facing the problem in adoption of Hybrid seed is, Lack of awareness towards cultural practices, lack of knowledge about newly introduced HYV, disease, and pest-resistant varieties, lack of credit facility by dealers because of 50% of farmers were in the area is marginal, and also lack of irrigation facility in the study area.

Table 5.5: Farmers Suggestions to the JK seeds in the study area.

S. No.	Suggestion to the company	Size of Holding			Total
		Small	Medium	Large	
1	More Publicity in the area	120	68	12	200
2	Meeting with farmers	123	58	19	200
3	Provide a demo sample to the small farmer	71	89	40	200
4	More field visits by a scientist	91	82	27	200

Source: Primary data collected from sample farmers.

According to their size of the firm and farmers' needs, Table 5.4 represents that the maximum no of farmers suggesting that the company needs to focus on more publicity in the study area. It makes quick and high purchases of a particular product that can take place in the shortest possible time by the customers.

The following are the promotional activities effectively attracting the farmer while choosing hybrid paddy in the study area are Farmers meetings, Free Trails, Success Stories, and Advertisement. So, the company may focus on that way to reach the farmers. More field visits will lead to increases the sales because “seeing is believing” and therefore it directly reflects upon the sales performance. The company doesn't have the technical staff, a scientist field visits to solve farmer's problems, mini kit trials to farmers for seeing product result may increase the sales if they focus on these things the company may increase their sales as well market share.

5.3: Dealers Perceptions for the market of Paddy seed in Study area

Table 5.6: Problems faced by Dealers in the Market Area.

S. No.	Particular	No. of Dealer	Percentage
1	Low margin.	6	28.57
2	The demand for the product on Credit by a farmer	21	100
3	Less credit period by the company	9	42.85
4	The high price of Labour	4	19.04
5	company policy & distribution system	9	42.85
6	Lack of field staff	18	85.71
	Total No. of Dealers	21	

Source: Primary data collected from dealers in the study area.

Table 5.5 represents that constraints of the dealers As follows, Demand for the product on credit by the farmers did not exist in this market because the company credit period is less compare to other companies in the study area, and Lack of field staff by the company who will play a key role in sales as well as they suggest the farmers about their product, company not providing good margin to dealers. The company had a good supply chain, but they are unable to supply seeds at the right time and the right place.

In this study area Mandals like Ramannapeta most of the area covered by OP paddy because of lack of knowledge about hybrid paddy transplanting if the company assists them maybe, they get good sales in this area.

Table 5.7: Dealers' suggestions for the JK seeds.

S. No.	Particular	No. of Dealer	Percentage
1	Reduce the Rate of Products	5	23.8
2	Good Margin to Dealer	2	9.52
3	More Credit Facility	4	19.04
4	More Awareness of Product	21	100
5	Promotional activity and follow up farmers	21	100
6	Increase field staff	21	100
7	Company staff meeting with dealer and retailer	21	100
8	Good quality of seeds	8	38.09

Source: Primary data collected from sample dealers in the study area.

Table 5.6 represents that, as per dealers view company should focus on Awareness towards the product by Adopting promotional activities, an increase of field staff may increase market share by providing information to dealers as well as farmers., Meeting with farmers about product or practices create awareness about company product and if the company provide more margins to dealers until product get good name in the field, they can focus on the selling of JK product more effectively, Most of the companies providing more credit facility to dealers for handle adequate quantity to overcome seasonal availability of the product.

Dealers were dissatisfied with the product of JK seeds because they are supplying pest infected seed, so it is impacting on their other brand seed sales. JKRH 2082 hybrid paddy seed cost is more when compare with other hybrid seeds which were existed in the market so farmers diverting to other brands.

Table 5.8: Constraints of marketing of rice hybrid seed in the study area.

S No.	Constraints	No. of dealers	Percentage
1	Lack of irrigation	6	28.57
2	Lack of fieldwork	21	100
3	Disease and pest	3	14.28
4	Product availability	16	76.19
5	Lack of awareness	21	100

Source: Primary data collected from sample dealers in the study area

Table 5.7 represents that, in dealers view because of Lack of awareness farmers are not cultivating hybrid seed, it may overcome by extension programs like field visits which will motivate the farmers to adopt hybrid seed, product availability is a major problem in season, so they are cultivating OP paddy like MTU1010, MTU1156, MTU1153.

According to farmers need disease and pest resistance varieties are less in the market, so they are not interested in hybrid paddy. Lack of technical field staff also one of the reasons for the non-adoption of hybrid seed because in this area farmers are new to hybrid seed so they need some assistance to adopt hybrid seed. Lack of knowledge about the best practices of paddy cultivation.

5.4: Product Promotional activities to be adopted by JK Seeds

Promotion refer to the entire set of activities, which communicate the product, brand or services to the user. The idea is to make people aware, attract and induce to buy the product, in preference over others. There are several types of promotions viz. advertising, press release, consumer promotions (Schemes, Discounts), Leaflet, Stickers, Calendars, Posters, Banner regarding dealers Tours, Dealers meetings, Incentives; regarding farmers Door to door visit, Field demonstrations, Meetings which creates more sale of the product. It helps the traders and the sales force to represent the product to the consumers. It is also helpful in brand positioning.

5.5: Supply chain System

JK seeds supply their product through the dealers, Dealers will supply to the farmers. The company appoints authorized dealers in a district to headquarter, as well as Mandal, headquarter for the marketing of the company products.

5.5.1: Field days

Field days are the farmer meet; the program is conducted by the company on selected farmer's fields. The company arranges small and big field days every year to explore its product for its new market.

5.5.2: Field Visit

Company personnel visits the farmer's field regularly and if any problem occurs that is solved on the spot by giving technical advice.

5.5.3: Free sample (Demo)

The company distributes free samples of different products to the farmers for the promotion of their products. The company distributes the small size packet as a free sample of new varieties, and it has been found that it is a most popular activity for launching the variety at introducing stage generally 2-3 samples are provided to each village.

5.5.4: Result Demonstration

After the distribution of sample results of the product shown to all the farmers through Result demonstration of the farmer field and company

provide transportation facility to farmers from village to field.

5.5.5: Advertisement

The company uses mass communication, print media, social media for the advertising of their new product launching & sale promotion.

5.5.6: Salesforces

The company appoints field assistant at block level to establish and maintain good relations and communication between the company and the farmers.

5.6: Sales promotion activities adopted by JK seeds

During the sales promotion the company has provides incentives to the dealers and distributors by undertaken the following various activities.

1. Profit margin
2. Field demonstrations
3. Farmers meeting.
4. Advertisements.

5.6.1: Profit margin

The profit margin is a ratio of a company's profit (sales minus all expenses) divided by its revenue. The profit margin ratio compares profit to sales and tells you how well the company is handling its finances overall. It's always expressed as a percentage. As this definition indicates, sales promotion may be directed either at end consumers or at selling intermediaries such as retailers or sales.

5.6.2: Field demonstrations

This is based on the extension principle “seeing is believing” and is one of the most effective methods to show the superiority of the company’s products to the customers. A progressive farmer who is an opinion leader is selected and the demonstration is conducted in his field in the presence of a group of farmers in the village. The farmers observe the results in the field and the local dealer calls on them in their farms and persuades them to buy the particular brand of this product.

5.6.3: Farmers meeting

The sales officer meets his village-level dealer and put the proposal to conduct farmers meeting in the village. With the cooperation of some leader farmers and dealers make it possible to conduct farmers meeting in the center of the village. Try to get maximum farmers in meetings and build up a strong reputation for the company and product. And Explain about company background their product range and superiority over other company products. Invites some farmers who got a good result and give time to share their experience of using such a product.

5.6.4: Advertising

Advertising includes all forms of mass media communication directed towards influencing the end consumer. Sales promotion, on the other hand, is concerned with the dissemination of information to dealers, retailers, customers.

5.7: SWOT Analysis JK seeds

A SWOT analysis (alternatively SWOT matrix) is a structured planning method used to evaluate the strengths, weaknesses, opportunities, and challenges involved in projecting a business venture. It involves specifying the objective of the business venture or project and identifying the internal and external factors that are favorable and unfavorable to achieve that objective. The detailed information about SWOT analysis of JK Agri. Genetic Pvt. Ltd. Company is provided in the following section.

5.7.1: Strength

Strength is the characteristics of the business or project that gives it an advantage over others.

- The company has a reputed brand image of the product in the market as well as among farmers.
- Dhanya Rekha, JKH-2082 variety has a good image in farmers.
- JK seeds have the most productive R&D in the seed industry.
- JK seeds have a wide range of hybrid seed and the improved seed of

field crop, vegetable, and fodder crop, and plant growth solutions.

Product quality

- ❖ Greenish of the crop.
- ❖ High yield.
- ❖ The high weight of grain
- ❖ Lodging resistant.
- ❖ Long panicle.
- ❖ High production.
- ❖ High range of variety in crop duration.
- Good packaging quality of products.

5.7.2: Opportunities

Opportunities are the element that the business or project could exploit to its advantage.

- There is a high demand for hybrid Paddy in Yadadri Bhuvanagiri district so there is wide scope for the market.
- More consumers are shifting to low and medium price segmentation from high price.
- The company can introduce a new variety of hybrid paddy as per market expectation. (eg. HYV, Pest / Disease Resistant, etc.)
- Year to year increase adoption of new improved and hybrid seeds by the farmer. It is a good opportunity for the company to increase its market share.
- To capture this existing profitable customer which has been diverted to other private companies.

5.7.3: Threats/Challenges

Challenges are elements that could effectively increase the business given period.

- Strong competitors are present in the field of hybrid paddy seed group.

- There are several seed companies in Yadadri Bhuvanagiri.
- Highly competitive market.
- JK Seeds paddy is a long duration variety *i.e.*, JKH-2082.
- Lack of seed supply in Season by JK seeds.
- Lack of Quality assurance system.
- Vulnerable to environmental stresses.
- Customers are diverse.
- Have a wide range of product requirements.

Chapter-VI
SUMMARY, CONCLUSIONS,
AND SUGGESTIONS

SUMMARY, CONCLUSIONS, AND SUGGESTIONS

6.1: Summary

Telangana is one of the major rice-producing states in India with a total area under paddy at 1471710 Ha with total production and yield of 66 Lakh tonnes and 2844 Kg/Ha (as per 2018-19 data). Productivity of paddy in Yadadri Bhuvanagiri district average was 72 quintal/Ha, farmers were getting 1450 rupees per quintal as procurement price. Mainly three types of rice are cultivated in this state *i.e.*, Kharif or aman rice, Rabi or boro rice, Summer or aus rice but in Yadadri Bhuvanagiri farmers cultivating only two seasons of paddy *i.e.*, Kharif and Rabi due to water scarcity. The productivity of Rabi rice is more than Kharif rice. The potential rice-growing districts in Telangana is Karimnagar, Nalgonda, Bhuvanagiri. The hybrid is grown mainly in Kharif season in the district, out of net cultivated area approximately 50 % of the land was under hybrid paddy cultivation in that district. The total market size of the hybrid paddy in Yadadri bhuvanagiri district at the Bhuvanagiri Region is 221.85 tonnes in quantity and the important markets in the Yadadri bhuvanagiri district are Bhuvanagiri, Shaligouraram, Athmakur, and Ramannapeta.

Out of total net cropped area *i.e.*, 134100 Ha area land, 52001 Ha land under paddy cultivation. More than 38.78 % of the total area under paddy cultivation comes in the Yadadri Bhuvanagiri district. Telangana (1471710 Ha) is the tenth major rice producing state in India. But, the productivity of the Telangana state of India is better as compared to other parts of India. The major reason is Musi river irrigation (N&P) and cultivating high yielding varieties. The hybrid paddy adoption rate is also very high and the seed replacement rate is also high. The farmers are dependent on the HYV and research varieties. The number of companies existing in the market is supplying different types of paddy seeds, JK seed is one of the leading seed companies, which the seeds to all corners of India and implementing many training and social programs.

The study is confined to the Yadadri Bhuvanagiri district of Telangana state and covers 4 major rice-growing Mandals *viz* Ramannapeta, Bhuvanagiri, Atmakuru, Shaligouraram, The four Manadals in Yadadri

bhuvanagiri has a good source of irrigation through irrigation projects and Musi left and right canals.

The present study illustrated the Market share of different types of paddy in the market area and preferences of dealers, paddy cultivating farmers in that area. 200 sample farmers were selected randomly and 21 wholesalers in Mandal headquarters who are the largest distributors were interviewed to collect the relevant information regarding the project. The leading market players in the case of hybrid paddy in the Yadadri Bhuvanagiri region are Bio-seed 53 percent market share followed by, Kaveri 13.6 percent, Tata 13.5 percent, Rasi 10 percent, VNR 5 percent market share which accounted for 90 % share in the hybrid paddy segment. The other players like Mahendra, Mahycho Seeds, Ajith Seeds, were playing with the rest of the 10 % share in the market, JK seed had 0.8 percent market share in hybrid paddy (JKRH 2082) In the study area, The farmers preferred OP and research paddy to grow in Kharif season and hybrid paddy in rabi season due to its non-shedding nature. The preferences of the farmers and their flexibility to switch among the paddy seed varieties providing great opportunities for the seed companies to increase their sales and extend their market into new areas. Farmers in the study area are using OP and research paddy more when compared to hybrid paddy due to lack of awareness and knowledge. The main prerequisites for the adoption of hybrid paddy by the farmers are High yield followed by Good Cooking quality, High/good market demand, Disease, and Pest resistance, Non-lodging problem, Low investment, Low seed cost, and Good seed germination.

The farmers demand mainly early and fine grain varieties with good High yielding hybrid paddy seeds with low cost of cultivation for Kharif and Rabi season respectively. The JKRH 2082, Dhanyarekha (research paddy) are the best suitable hybrids for this market. According to the landholding pattern of the farmers, 1Kg, 2Kg & 3Kg packing was the best suitable packings which can satisfy the seed rate requirement of the farmers in these markets because most of the farmers are marginal.

6.2: Conclusions

Following conclusions are made from the finding of the study area

- The study area constitutes 34 percent small farmers and 50 percent semi medium farmers followed by 16 percent medium (sample size 200)
- The farmers in the study area were interested in purchasing OP varieties of paddy viz MTU1010, MTU 1153, MTU1156, KNM 118, and others, Irrespective of the company/brand, due to their past beliefs and experiences with these varieties at the Bhuvanagiri region of Yadadri Bhuvanagiri district. JK Seeds is having good paddy hybrids (JKRH 2082), long-duration varieties, JKRH 2082 has got a high yield with low investment to compare to bio-seed. But, farmers need is early duration varieties
- Taking in totality for Yadadri Bhuvanagiri district there was a huge scope for hybrid paddy cultivation, Due to lack of awareness farmers are not adapting to hybrids.
- The farmers with landholding status of 4-6 acres are more in study area proved to be risk bearers and can be called innovators or progressive farmers and they are demonstrated to be more quick decision-makers for cultivating hybrid paddy in future.
- Mostly farmers (marginal) were cultivating the paddy which is available at the dealer.
- In the study area, among the farmers, 70% of farmers preferred while purchasing the seed by Yield,50% farmers preferred lodging resistance, Cooking quality 15% of farmers preferred pest and disease resistant if the seed has these qualities, they are ready to adopt a new variety of any brand.
- 10% of farmers preferred the brand image of the product and 5% of farmer preferred demonstration,
- As per the observation of farmers who cultivated JK seeds product, they have positive responses due to the best result of JKRH2082 and

Dhanyarekha but because of the unavailability of products at the dealer, they migrate to another product.

- In the study area among the dealers 38% of dealers suggested that providing good margins to the dealers,30% of dealers suggested that promotional activities in the study area,20% of dealers suggested that create awareness about the product in the study area. Engaging strategies like promotion practices *i.e.*, demonstrations, dealer's meetings, product literature, booking scheme, and cash discounts leads to an increase in the reachability of products.
- An effective marketing strategy means management of 4 elements of Marketing (4P) *i.e.*, Product, Price, Place, Promotion to increase their sales.
- There is a necessity in the Increase of technical staff, sales manager at block level for increasing market share.

6.3: Suggestions

In promotional activity adoption of strategies will give positive results. The farmers need field-level activity, about brand performance, this indicates that the company improves existed promotional activities, fieldwork, and manpower. The following are some suggestions.

- Schemes such as a discount, incentive for timely payments must be followed to motivate the dealer to sell products of the company. A promotional gift such as pens, pen stand, watch, notebook, calculator, calendar, etc. can be provided to the dealer which will keep the company and its brand in the dealer's mind.
- Adequate margins are given to distributors, dealers seminar, the meeting must arrange time to time by the company to make them aware of new products and schemes.
- Any company, if they respond to Dealers problems as much as possible, it will give good results in sales, Because of the taking of time they may not do force sale.

- As credit plays an important role in purchasing the seed stock at the dealer's level, providing credit to the dealers in the weak segments can increase the sales by handling large quantities in season.
- It was observed that if sufficient field staff of the seed industry in the market, will increase sales as well as market share, it is very essential to perform the fieldwork when the products are new in the market, Assigning agriculture field staff for assisting farmers growing JK varieties draws out the best results and helps the company to gain potential customers.
- Timely supplying seeds to dealers will increase market share. It may be possible through the supply chain system by providing timely delivery to their dealers.
- Providing the free sample (mini kit trials) to progressive farmers may give a positive response towards new seed.
- Paddy is a major crop in the Yadadri and has huge potential for seeds so more emphasis is given to early duration Varieties (120-130 days).
- The research and development wing of the company can emphasize the development of resistant varieties as well as early duration varieties.

ANNEXURE

Annexure-1

Name of the district:

Name of the Mandal:

Name of the village:

1. Farmer details:

- Name of the farmer:
- Age:
- Address:
- Contact number:
- Education:
- Annual income:

2. Landholding:

Marginal farmer	
Small farmer	
Medium farmer	
Large farmer	

3. Others crops grown rather than paddy:

4. Method of sowing:

a) Direct seeding

b) Transplanting

5. Type of irrigation:

6. Type of paddy seed farmer preferred mostly in this particular area:

Hybrid	
Open-pollinated	
Research	

- why only that
- why not others

7. Name of the paddy variety grown:

Variety	company name	Growing season	Duration of crop	Quantity of seed per bag	The total price of seed	Price per Kg	Yield

8. Grain type:

Bold	
Slender	
Narrow	

9. Crop intolerance measures:

- Lodging: Yes / No
- Diseases:
- Pest:
- Others:

11. How farmer got to know about that particular variety firstly:

- Advertisements
- company meetings and demonstrations
- By dealers
- By distributors

12. How he/she started to use that particular variety of JK Seeds (if they used):

- Self-interest
- By seeing results
- Suggested by other farmers
- Demonstrations by company members

13. How long he is using the variety:

14. What made farmer continue with JK seeds:

Quality	
Price	
Maintenance	
Availability with dealers	
Tolerance capacity	
Better than other companies	

15. Any problems faced by a farmer while using paddy JK varieties:

- Germination
- Grain shedding
- Lodging
- Pest and disease

16. Farmer opinion about JK varieties:

- Good
- Average
- Below average
- Poor

17. Other competitors that exist in surrounding areas:

.....

18. Does the company lack anything compared to others?

.....

19. Suggestions given by a farmer:

.....

Annexure-2

QUESTIONNAIRE FOR DEALERS/WHOLESALERS/RETAILERS

1. Name of the dealer/Wholesaler
2. Shop Name
3. Address
4. Village/Mandal
5. District
6. Ph.No
7. No.of Sub Dealers

2. Which Companies dealership do you have?

.....

3. Name of important crops grown in the area

A. Kharif crops (ha)

B. Rabi crops (ha)

4. Top seeds company's sales in the area.

S.No	Company	Price per unit	Total sales in Packets	
			2018-2019	2019-2020

5. What facilities does the company provide?

Name of the Company	Credit limit (in Rs/-)	Credit period (Days)	Promotions	Incentives	Schemes

6. What farmers preferred while purchasing the Seeds?

(a) Name/brand of company

(b) Quality

(c) Price

(d) Neighboring Farmers

(e) Past experience

7. Paddy share

JK Paddy seeds				Competitors Paddy seed			
Hybrid	Variety	Research	OP	Hybrid	Variety	Research	OP

8. Factor affecting the purchase behavior of farmer

- (a) High yielding (b) Duration (c) Pest and Disease resistant
 (d) Price (e) Drought tolerant (f) Lodging

9. Important factor is to be considered while purchasing seeds.

- (a) Name of company brand (b) Price (c) More profit
 (d) yield (e) Own experience

10. What are the strength and weaknesses of jk Seeds?

Company	Strength	Weakness

11. How much is the Market share (company/brand) of Different Seeds?

1. 2. 3. 4.

12. Market Size in Quintal

Bag/in kg			
Hybrid	Variety	Research	OP

13. Company-wise promotional work carried out Seed marketing

Company	Name/nature of personal activities	Frequency (daily, weekly, monthly, Quarterly, half-yearly)
	1. Demonstration	
	2. Crop seminar	
	3. Farmer meeting	
	4. Distribution of sample	
	5. Field days	
	6. Dealer meeting	
	7. Product literature	
	8. Gift with product another scheme (discount, coupon)	
	9. Other activities (sports, medicinal camp, soil testing camp.)	
	10. Exhibitions	

14. Product display and advertising:

- (a) Product display (b) Type of display (c) Frequency of total display
(d) Dealer point display (e) Village level display (f) Wall painting
(g) Dealer shop painting (h) Tractor/trolley painting (i) Advertising

15. Constraints of seeds marketing in the area:

- a. High price b. Lack of fieldwork c. Adverse climate.
d. Diseases & Insects e. Other constraints h. Lack of awareness

16. Future market expectations and expected demand for a different variety, Hybrids of JK Seeds.

17. What improvements JK Seeds should do to satisfy your need?

18. What JK Seeds should do to promote his market in hybrid, Variety Paddy seeds?

CURRICULUM VITAE

CURRICULUM-VITAE

Name of the author - BORA ASHOK KUMAR
Place - Srikakulam, A.P,
Date of Birth - 5th July 1994
Father Name - Mr. Yarrannaidu Bora
Mother Name - Rajeswari Bora



He has joined different institutions and got the following degrees -

CLASS/DEGREE	INSTITUTION	Board/ University	YEAR	%/CGPA
MBA (Ag.)	IABM, Jabalpur	Jawaharlal Nehru KrishiViswavidyalaya, Jabalpur	2020	72
B. Sc. (Ag)	Agricultural College, Bapatla	Acharya N.G.Ranga AgriculturalUniversity, Hyderabad	2012- 2016	80.7
Intermediate	Sri Chaitanya junior college, Srikakulam	Board of Intermediate Education	2009- 2011	92
SSC	Arunavidyalayam , Tekkali	Board of Secondary Education	2009	89.9

For the partial fulfillment of the requirements of the master's degree program, he was allotted a project report on "Market Share and farmers perception of Hybrid Rice seed with Special Reference to JK Agri. Genetic Pvt. Ltd. in Yadadri Bhuvanagiri District of Telangana" which was successfully conducted by him and submitted in the form of the project report and completed the degree of M.B.A. (Ag.) Agribusiness Management during the year 2018-20 with 7.29 OGPA out of 10 point scale