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## Identification of FPOs and traders in the major areas for sourcing of selected organic cereals and pulses (paddy, green gram and red gram) in Telangana and Andhra Pradesh

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### Abstract

Growing consumer demand for organic food and awareness of the negative effects of synthetic chemicals in the food chain have made organic agriculture an attractive alternative to the conventional method of farming, which relies solely on chemicals. The present study entitled "A study on sourcing of organic cereals and pulses (paddy, green gram and red gram) in Telangana and Andhra Pradesh for B2B segment" was carried out in Andhra Pradesh and Telangana. YSR Kadapa and Srikakulam districts from Andhra Pradesh whereas Siddipet district from Telangana were identified for sourcing of organic paddy. Five FPOs from YSR Kadapa, five FPOs and three traders from Srikakulam whereas five FPOs and two traders from Siddipet were identified for sourcing of organic paddy. YSR Kadapa and Anantapur districts from Andhra Pradesh whereas Narayanpet district from Telangana were identified for sourcing of organic red gram. Five FPOs and three traders from YSR Kadapa, five FPOs and two traders from Srikakulam whereas five FPOs from Narayanpet were identified for sourcing of organic red gram. Anantapur and Srikakulam districts from Andhra Pradesh whereas Narayanpet district from Telangana were identified for sourcing of organic green gram. Five FPOs from YSR Kadapa, five FPOs and five traders from Srikakulam whereas five FPOs from Narayanpet were identified for sourcing of organic green gram. These districts are selected because in these districts both organic and conventional farming is seen.

**Keywords:** Andhra Pradesh, Telangana, sourcing, organic, FPOS, traders

### 1. Introduction

India is the most populous nation in the world, with a total population of 1.429 billion. The amount of arable land available is decreasing daily as a result of the growing population (Worldometer, 2023) [1]. The productivity of agricultural land and the condition of the soil must be improved in order to supply the rising population with the food, fodder, fuel, fibre, and other necessities they demand. Most crops have seen an increase in productivity due to green revolution technologies like the significant use of synthetic chemicals like fertilisers and pesticides, the use of high yielding crop types, the use of numerous irrigation systems, and the adoption of other novel technologies. However, the continued indiscriminate application of these heavy inputs resulted in a reduction in crop output and productivity as well as a decline in the health of the soil and the immediate environment.

Organic farming is practised in 187 countries and at least 3.1 million farmers used organic practices to manage 72.3 million hectares of agricultural land. India ranks fifth in terms of Organic Agricultural land in the world with 2.3 m hectares and first in terms of total number of Organic producers. In terms of organic area in India, Andhra Pradesh stands at 12<sup>th</sup> position with 47,922.42 ha which is one per cent of 4726714.74 ha cultivable area under the organic and Telangana stands at 14<sup>th</sup> position with 39,200.47 ha which is 0.8 per cent of 4726714.74 ha cultivable area under the organic. India produced around 3430735.65 MT (2021-22) of certified organic products which include all varieties of food products namely cereals, pulses, millets, oil Seeds, fruits, vegetables, spices, aromatic plants, medicinal plants, tea, coffee etc.

In terms of organic farm produce in India, Andhra Pradesh stands at 13<sup>th</sup> position with 19,659.26 MT which is 0.5 per cent of 3430735.65 MT of total organic farm produce and Telangana stands at 18<sup>th</sup> position with 3,871.64 MT which is 0.1 per cent of 3430735.65 MT of total organic farm produce. (Source: Apeda, 2023) <sup>[6]</sup>.

The process of obtaining agri-produce for trading or processing is referred to as sourcing in agribusiness. It involves identification and selection of suppliers who provides high-quality produce, negotiating prices and terms, and managing the supply chain to ensure timely delivery of materials.

**2. Methodology**

YSR Kadapa, Anantapur and Srikakulam districts from Andhra Pradesh were identified whereas Siddipet and Narayanpet districts from Telangana were identified as the

potential areas to carry out the study because in this areas, organic cultivation of paddy, green gram and red gram is more and also organic promoting agencies are working in these identified areas. Primary data was gathered through interview schedules and secondary data was collected using academic articles, books, journals, blogs and other databases. The gathered information was tabulated and analysed using statistical methods including cost analysis, frequency and percentages.

**3. Results and Discussions**

**3.1 Details of Sources for procuring organic paddy**

The FPOs and traders of Srikakulam, YSR Kadapa districts of Andhra Pradesh and Siddipet district of Telangana. 15 FPOs and five traders have been identified as potential sources for procurement of organic paddy.

**Table 1:** Details of the FPOs as a source for procuring organic paddy

S. No	Name of the FPO	Major crops	Minor crops	Average land holding (in acres)	Average land holding of organic paddy (in acres)	Average production of organic paddy (in quintals per year)
<b>I YSR Kadapa</b>						
1	Proddatur Prakruthi Vyavasaya Utpattidarula Sahakara Marketing Sangam Ltd.	Paddy	Pulses	780	390	9750
2	Proddatur Farmer Producer Company	Paddy	Vegetables	1505	1129	28219
3	Vemula FPO	Paddy	Green gram	1605	1204	30094
4	Swami Venkateshwara FPO	Paddy	Pulses	150	100	2500
5	Janardhan FPO	Paddy	Red gram	225	169	4219
<b>II Srikakulam</b>						
1	Ramana FPO	Paddy		420	315	7875
2	Maathota Vanasahaja Producer Company Limited	Paddy		750	563	14063
3	Manyam sahaja Producer company	Paddy	Green gram	375	281	7031
4	Manya Deepika FPO	Paddy	Green gram	125	94	2344
5	Gogu Kiranalu Producer Company Limited	Paddy		852.5	853	21313
<b>III Siddipet</b>						
1	Suraksha FPCL	Paddy		1260	945	23625
2	Safe food FPCL	Paddy		1275	956	23906
3	Dubbak Farmer Producer MACS	Paddy		925	925	23125
4	Kondapak Farmer Producer MACS	Paddy		872.5	654	16359
5	Cherial FPCL	Paddy		512.5	384	9609
Average				775.5	597	14313

**3.1.1 FPOs as a source for procuring organic paddy**

All the identified FPOs have Participatory Guaranty System (PGS)-India (organic certification) given by the Ministry of Agriculture, Govt. of India. All the FPOs are supported by NABARD and the State Department of Agriculture. They procure organic produce from farmers who have organic certification. The average area under these 15 FPOs is 776 acres in which the average area under organic paddy is 597 acres where the average production is 14313 quintals per year.

**3.1.2 Traders as a source for procuring organic paddy**

All the identified traders have trading licenses to deal with organic produce and also they deal with both organic and conventional produce. They procure organic produce from farmers who have organic certification. They not only deal with organic paddy but also deals with wide crops.

**Table 2:** Details of the traders as a source for procuring organic paddy

S. No	Name of the Enterprise	Commodity	Experience in trading (in years)	Quantity traded per month
<b>I Siddipet</b>				
1	Reddy Shree Enterprises	Paddy	12	175
2	Shree Balaji traders	Paddy	7	190
<b>II Srikakulam</b>				
1	Gvrao traders	Paddy	9	130
2	Om Sankar Rice	Paddy	16	140
3	Sri Venkateshwara Traders	Paddy	10	120
Average			11	151

From the above table, the average experience in trading of the selected traders is 11 years with a minimum of seven years and a maximum of 16 years. The average quantity traded per month is 151 quintals.

### 3.2 Details of Sources for procuring organic red gram

The FPOs and traders of Anantapur, YSR Kadapa districts of Andhra Pradesh and Narayanpet district of Telangana. 15 FPOs and five traders have been identified as potential sources for procurement of organic red gram

**Table 3:** Details of the FPOs as a source for procuring organic red gram

S. No	Name of the FPO	Major crops	Minor crops	Average land holding (in acres)	Average land holding of an organic red gram (in acres)	Average production of an organic red gram (in quintals)
I	<b>Proddatur</b>					
1	Janardhan FPO	Paddy	Red gram, Bengal gram	225	113	675
2	Jammalamadugu Farmers MACs Ltd	Red gram, Green gram	Bengal gram	418	209	1253
3	Ekashila Farmer Producer Company	Red gram, Green gram, Bengal gram	Jowar	755	378	2265
4	Proddatur Prakruthi Vyavasaya Utpattidarula Sahakara Marketing Sangam Ltd.	Paddy	Pulses	780	195	1170
5	Ramana FPO	Pulses		495	248	1485
I	<b>Anantapur</b>					
1	Talupula FPCL	Redgram	Ground nut	1050	788	4725
2	Sevalal Cooperative	Red gram	Chilli	263	131	788
3	Ananta sendriya vyavasaya	Pulses	Millets	825	619	3713
4	Ragulapadu FPCL, Vajrakarur	Red gram	Millets	245	123	735
5	Pedda KFPCL, Koukuntla	Red gram	Vegetables	270	135	810
III	<b>Narayanpet</b>					
1	Amalika FPCL	Pulses		653	489	2936
2	Abhirami FPCL	Pulses		125	63	375
3	Makthal FPCL	Pulses		668	334	2003
4	Bhu sampatti FPCL	Pulses		263	131	788
5	Damaragidda FPCL	Red gram		795	398	2385
	Average			553	310	1860

#### 3.2.1 FPOs as a source for procuring organic red gram

All the identified FPOs have Participatory Guaranty System (PGS)-India (organic certification) given by the Ministry of Agriculture, Govt. of India. All the FPOs are supported by NABARD and the State Department of Agriculture. They procure organic produce from farmers who have organic certification. The average area under these 15 FPOs is 553 acres in which the average area under organic red gram is 310

acres whereas the average production is 1860 quintals per year.

#### 3.2.2 Traders as a source for procuring organic red gram

All the identified traders have trading licenses to deal with organic produce and also they deal with both organic and conventional produce. They procure organic produce from farmers who have organic certification. They not only deal with organic red gram but also deals with wide crops.

**Table 4:** Details of the traders as a source for procuring organic red gram:

S. No	Name of the Enterprise	Commodity	Experience in trading (in years)	Quantity traded per month
1	Om Sri Veera Venkata Vasavamba Traders	Red Gram	6	110
2	Jayan food products	Red Gram	11	130
3	Lakshmi Uma Traders	Red Gram	8	120
4	ICCOA	Red Gram	15	110
5	DDS	Red Gram	17	135
	Average		11	121

From the above table, the average experience in trading of the selected traders is 11 years with a minimum of seven years and a maximum of 17 years. Average quantity traded per month is 121 quintals.

#### 3.3 Details of Sources for procuring organic green gram

The FPOs and traders of Anantapur, YSR Kadapa districts of Andhra Pradesh and Narayanpet district of Telangana. 15 FPOs and five traders have been identified as potential sources for procurement of organic green gram.

**Table 5:** Details of the FPOs as a source for procuring organic green gram:

S. No	Name of the FPO	Major crops	Minor crops	Average land holding (in acres)	Average land holding of organic green gram (in acres)	Average production of organic green gram (in quintals)
I	<b>Proddatur</b>					
1	Gayathri Farmer Producer Company	Green gram	Black gram	495	371	1114
2	Jammalamadugu Farmers MACs Ltd	Red gram, Green gram	Bengal gram	418	209	626
3	Ekashila Farmer Producer Company	Red gram	Jowar	755	378	1133
4	Ramana FPO	Pulses		495	248	743
5	Proddatur Prakruthi Vyavasaya Utpattidarula Sahakara Marketing Sangam Ltd.	Paddy	Pulses	780	195	585
I	<b>Anantapur</b>					
1	Konakondla FPCL	Green gram, Black gram	Ground nut	490	368	1103
2	Amidyala FPCL,	Green gram, Black gram	Ground nut	523	392	1176
3	Ragulapadu FPCL			589	265	700
4	Shaiksanipalli FPCL			125	94	200
5	Ananta sendriya vyavasaya	Pulses	Millets	825	206	619
III	<b>Narayanpet</b>					
1	Amalika FPCL	pulses		653	163	489
2	Abhirami FPCL	pulses		125	63	188
3	Makthal FPCL	pulses		668	334	1001
4	Bhusampatti FPCL	Pulses		263	131	394
5	Damaragidda FPCL	Red gram and Green gram		795	398	1193
	Average			545	249	732

**3.3.1 FPOs as a source for procuring organic green gram**

All the identified FPOs have Participatory Guaranty System (PGS)-India (organic certification) given by the Ministry of Agriculture, Govt. of India. All the FPOs are supported by NABARD and the State Department of Agriculture. They procure organic produce from farmers who have organic certification. The average area under these 15 FPOs is acres in which the average area under organic green gram is acres whereas the average production is quintals per year.

**3.3.2 Traders as a source for procuring organic green gram**

All the identified traders have trading licenses to deal with organic produce and also they deal with both organic and conventional produce. They procure organic produce from farmers who have organic certification. They not only deal with organic green gram but also deals with wide crops.

**Table 6:** Details of the traders as a source for procuring organic green gram:

S. No	Name of the Enterprise	Commodity	Experience in trading (in years)	Quantity traded per month (in quintals)
I	<b>YSR Kadapa</b>			
1	Sri Jaya Venkateswara Traders	Organic Green gram	8	90
2	Sri chakra enterprises	Organic Green gram	13	108
II	<b>Anantapur</b>			
1	Bhargavi Traders	Organic Green gram	10	110
2	ICCOA	Organic Green gram	17	120
3	Lakshmi Narasimha Imports & Exports Pvt. Ltd.	Organic Green gram	7	105
	Average			106

From the above table, the average experience in trading of the selected traders is 11 years with a minimum of seven years and a maximum of 17 years. The average quantity traded per month is 106 quintals.

**4. Conclusions**

From the study, it was seen that there are sufficient sources are available for procuring organic produce, particularly for crops (paddy, red gram and green gram) in YSR Kadapa, Srikakulam and Anantapur districts of Andhra Pradesh whereas Siddipet and Narayanpet districts of Telangana.

**5. References**

1. Worldometers; c2023. <https://www.worldometers.info/world-population/population-by-country/>
2. World Trade Organisation; c2022. <https://www.wto.org/>
3. Food and Agriculture Organisation; c2022. <https://www.fao.org/home/en>
4. International Federation of Organic Agriculture Movement (IFOAM); c2022. <https://www.ifoam.bio/>
5. U.S. Department of Agriculture; c2021. <https://www.usda.gov/>

6. Agricultural and Processed Food Products Export Development Authority (APEDA); c2023. Organic products. <https://apeda.gov.in>
7. Press Information Bureau (PIB); c2022. Agriculture schemes. <https://www.pib.gov.in>
8. U. S. Department of Agriculture; c2022. <https://www.usda.gov>
9. Andhra Pradesh State Portal; c2023. <https://www.ap.gov.in>
10. Telangana State Portal; c2023. Districts. <https://www.telangana.gov.in/about/districts>
11. Madne M. Study on supply chain of Vegetables and fruits in B2B in Hyderabad and Rangareddy Districts of Telangana state. M.Sc. (Agri.) thesis, Professor Jayashankar Telangana State Agricultural University; c2021.