



GREENGRAM

(January to December, 2022)



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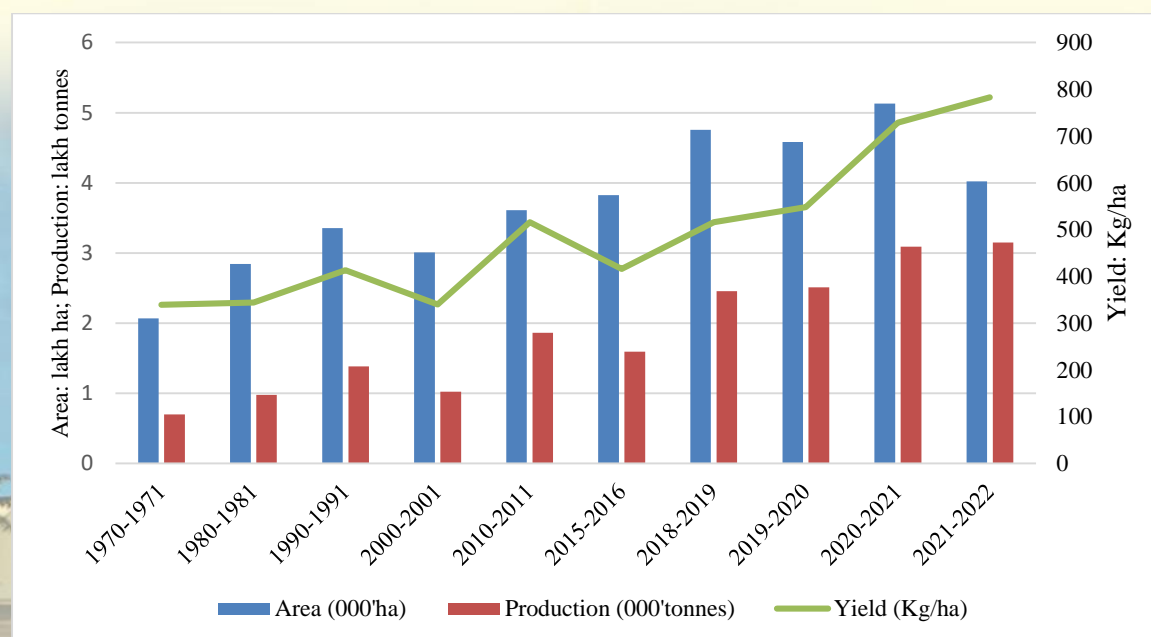
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Crop Outlook Reports of Andhra Pradesh

GREENGRAM– January to December 2022

Greengram, scientifically known as *Vigna radiata*, is a plant species in the legume family and is commonly called mung bean or moong in India. India is its primary origin and is mainly cultivated in East Asia, South East Asia and Indian subcontinent. It is the third important pulse crop in the country, which occupies nearly 16 per cent of the total pulse area in India. It contains protein-rich seeds with 20-25% protein, and sometimes plants are cut and ploughed into the soil as green manure to enrich the soil with nitrogen.

Figure 1: Area, production and yield of greengram in India



Source: www.indiastat.com and eands.dacnet.nic.in,

India is the major producer of green gram in the world, and it is grown in almost all the states. It is grown on about 40.38 lakh hectares with a total production of 31.5 lakh tonnes with a productivity of 783 kg/ha and contributes 11 % to the total pulse production in the year 2021-22 (Figure 1). In Kharif 2022-23, greengram production was 17.5 lakh tonnes (1st advance estimates) in an area of 33.37 lakh hectares (agricoop.nic). In Andhra Pradesh, greengram was cultivated in an area of 0.97 lakh ha with a production of 0.83 lakh tonnes, contributing 4.74 % of production to country (Final Estimates, 2021-22). According to 1st advance estimates during 2022-23, greengram was grown in 0.08 lakh hectares with a production of 0.04 lakh tonnes and productivity was 493 kg/ha.

As per some private sources (Table 1), in the marketing year 2022-23, the consumption of greengram was 26 lakh tonnes against the production of 26.30 lakh tonnes. The rest of the demand-supply gap was covered by importing around 0.5 lakh tonnes along with the opening stocks of 6.59 lakh tonnes.

Table 1: Balance sheet of greengram(in lakh tonnes)

Marketing Year (March to February)	2021-22*	2022-23*
Opening stocks	2.10	6.59
Production	26.53	26.30
Imports	1.71	0.50
Total Supply	30.34	33.39
Exports	0.25	0.30
Consumption	23.50	26.00
Total Demand	23.75	26.30
Ending stocks	6.59	7.09

Source: agriwatch.com * Advance Estimates

Table 2: Area, Production and Yield of major producing states of greengram in India

States	2000-01		2010-11		2015-16		2020-21		2021-22		
	A	P	A	P	A	P	A	P	A	P*	Y
Rajasthan	458	79	1050	653	1364	597	2090	1170	2147	1202	560
Karnataka	451	185	402	111	348	44	440	162	420	155	369
Maharashtra	714	244	558	374	366	69	394	154	378	147	390
Madhya Pradesh	90	23	99	35	295	131	157	117	164	121	741
Bihar	187	108	172	104	169	94	110	73	110	73	664
Andhra Pradesh	520	184	167	52	212	137	105	82	97	83	856
India	3008	1023	3610	1862	3828	1593	4238	3090	40.38	3150	729

Source: www.indiastat.com and eands.dacnet.nic.in. Area (A)-000'ha Production (P) - 000'tonnes Yield (Y)-kg/ha*provisional figures, yet to be finalized (Andhra Pradesh figures from Final Advance Estimates, 2021-22)

The important greengram producing state in the country is Rajasthan followed by Karnataka, Maharashtra, Madhya Pradesh, Bihar and Andhra Pradesh (Table 2). Rajasthan and Madhya Pradesh states showed an increase in the area grown over the last two decades, while the other states, Andhra Pradesh, Bihar, Karnataka, and Maharashtra its decreased. The reason behind the decline in greengram production is the improved irrigation facilities, which

allow for the growth of intensive crops such as rice/wheat and commercial crops. So, the government has heavily incentivized the MSP of greengram, which increased from Rs. 4350 in 2014-15 to Rs. 7755 in 2022-23.

Table 3: Procurement of greengram under Price Support Scheme (PSS)

Commodity /year	Support price (Rs per quintal for FAQ)	Quantity procured in tonnes	Value in lakhs	Major states of procurement
2016-17	5225	949	4962.03	Karnataka and Maharashtra
2017-18	5575 (Kharif) and 5225 (Rabi)	40730	223141	Andhra Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Rajasthan and Telangana
2018-19	6975 (Kharif) and 5575 (Rabi)	30696	213506	Rajasthan, Maharashtra and Karnataka
2019-20	7050 (Kharif) and 6975 (Rabi)	16605	116871	Rajasthan, Andhra Pradesh, Odisha and Karnataka
2020-21*	7196 (Kharif) and 6975 (Rabi)	2084	14894	Rajasthan, Odisha and Haryana
2021-22	7275 (Kharif) and 7196 (Rabi)	22913	165484	Madhya Pradesh, Rajasthan and Karnataka

Source: *Agricultural Statistics at a glance, 2021*

* As on 04.03.2021, 'FAQ: Fair and Average Quality'

The procurement of greengrams under the Price Support Scheme by the Government of India is presented in Table 3. In 2021-22, a total of 22913 tonnes were procured at a price of Rs. 7275 per quintal in kharif and Rs. 7196 per quintal in rabi, which has a value of Rs.165484 lakhs.

Table 4: Area, production and yield of greengram before and after bifurcation of Andhra Pradesh

Particulars	Before Bifurcation		After Bifurcation					
	2012-13		2015-16		2021-22		2022-23*	
	AP	India	AP	India	AP	India	AP	India
Area (in '000 Ha)	278 (10.22%)	2720	211 (18.14%)	3828	97 (2.40%)	4038	8 (0.2 %)	3504
Production (in '000 tonnes)	194 (16.30%)	1190	137 (11.60%)	1590	83 (2.63%)	3150	4 (0.2 %)	1750
Yield in Kg/Hectare	900	436	648	416	856	780	493	499

Source: *agricoop.nic.in – 2021-22, des.ap.gov.in 2012-13, 2015-16.*

*1st advance estimates of India and AP.

Figures in parenthesis indicate per cent share of Andhra Pradesh in India.

As seen in Table 4, the contribution of greengram acreage in Andhra Pradesh before bifurcation was 10 per cent to total greengram production of India and after bifurcation, it was 2.63 per cent which in 2021-22. The productivity has decreased from 900 kg/ha to 856 kg/ha.

Table 5: Major greengram producing districts in Andhra Pradesh (2020-21)

District	Area ('000 hectares)			Rank	Production ('000 tonnes)			Rank	Yield (Kg/ha)	Rank
	Khari f	Rabi	Total		Kharif	Rabi	Total			
Guntur	1	30	31	1	1	36	37	1	1188	1
Srikakulam	0	20	20	2	0	9	9	2	475	6
Vijayanagara m	0	12	12	3	0	6	6	5	496	5
West Godavari	0	5	5	6	0	7	7	3	1300	2
East Godavari	0	6	6	5	0	5	5	6	740	4
Krishna	4	5	9	4	1	6	7	4	746	3
Other districts	6	16	22		2	8	10		-	
Andhra Pradesh	11	94	105		4	77	81		772	

Source: apagrisnet.gov.in

Table 5 shows the major greengram producing districts in Andhra Pradesh in the year 2020-21. Greengram crop in Andhra Pradesh is cultivated mainly in rabi season. The highest acreage of greengram is grown in Srikakulam district as the farmers in this region practise paddy followed by greengram, and its soil is suited for greengram cultivation, followed by Guntur, Vijayanagaram, East Godavari, West Godavari and Krishna. While Guntur ranks highest in area, production of greengram, with the highest productivity of 1188 kg/ha, which is higher than the state average of 772 kg/ha. These six districts together account for 87.6 per cent of the total greengram production in Andhra Pradesh.

Table 6: Cost-return structure of greengram in Krishna Zone 2020-21 (Rs./ha)

S NO	Particulars	Greengram
1	Labour costs (Rs/ha)	19575(28.39)
2	Material costs(Rs/ha)	17784(25.79)
3	Variable costs(Rs/ha)	37686(54.65)
5	Total cost(Rs/ha)	68953(100)
6	Yield (Qtl/ha)	11

7	Price (Rs./qtl)	6500
8	Gross returns (Rs/ha)	71445
9	Net returns (Rs/ha)	2492
10	Gross Margin (Rs/ha)	33759
11	Return on rupee BCR	1.04
12	Return on VC	1.90
13	Cost of Production (Rs./qtl)	6273

*Source: Survey Data , BCR – Benefit-Cost Ratio, VC- Variable costs
Figures in the parentheses indicate the per cent of the item to the total cost*

The cost-return structure of greengram in Krishna Zone (Guntur, Prakasam and Krishna districts) of Andhra Pradesh for the year 2021-22 is presented in Table 6. The cost of production in greengram was Rs. 6273/quintal. Gross margin denotes returns over variable costs, which apply to owner farmers, whereas net returns denote returns over total costs, which apply to tenant owners. Gross margin and net returns were Rs. 333759 per ha and Rs. 2492 per ha respectively. Return on rupee BCR was 1.04, which is concerning for tenant farmers, and return on variable costs was 1.90, which is related to owner farmers.

Greengram Price Outlook:

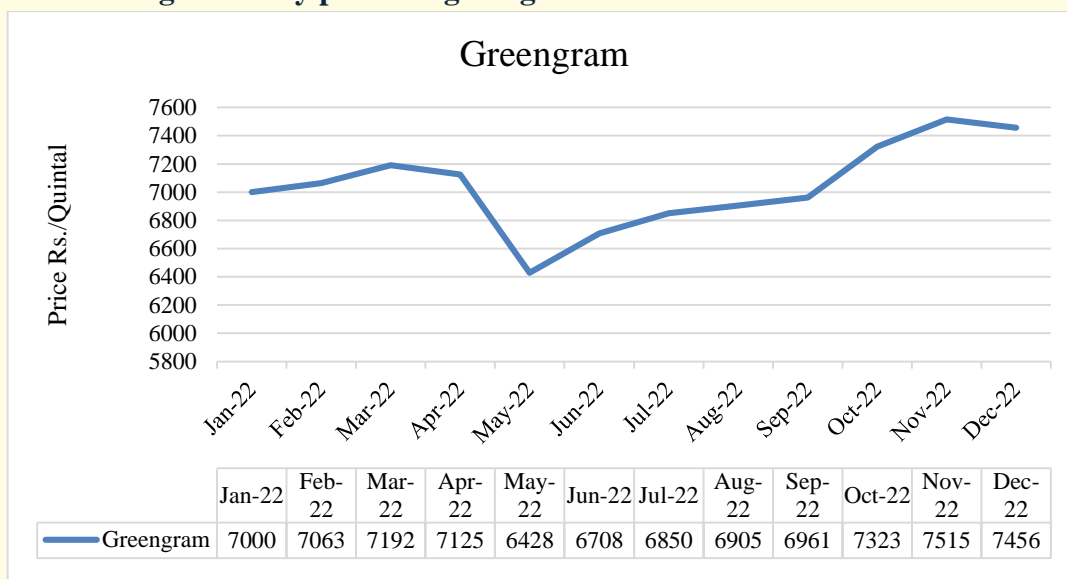
During Kharif Marketing Season (KMS) 2021-22, market prices remained below Minimum Support Price (MSP) on most days in Madhya Pradesh and Rajasthan except Maharashtra (Table 7). The average difference between market prices and MSP was (-)20.6 percent in Rajasthan, (-) 16.3 percent in Madhya Pradesh and (-)4.4 percent in Maharashtra.

Table 7: Market Prices vis-à-vis MSP of greengram in Major Producing States in KMS 2021-22

States	No. of days market prices reported	No. of days market prices were above MSP	No. of days market prices were below MSP				Average difference (%) between MSP & market price
			<5 %	5%-10%	10%-15%	>15 %	
Maharashtra	144	46	25	14	36	23	-4.4
Rajasthan	150	0	0	1	15	134	-20.6
Madhya Pradesh	138	0	2	20	64	52	-16.3

*Source: 1. AGMARKNET, Directorate of Marketing & Inspection (DMI), Department of Agriculture, Cooperation and Farmers Welfare, Ministry of Agriculture and Farmers Welfare
2. Directorate of Economics & Statistics, Ministry of Agriculture and Farmers Welfare*

Figure 2: Average monthly prices of greengram in Andhra Pradesh



Source: Data obtained from Balaji Price Bulletin

Figure 2 explains the average monthly prices of greengram in Andhra Pradesh from January 2022 to December 2022. As per the information shared by Agricultural Market Intelligence Centre, ANGRAU, Greengram stocks in Central Pool and private stocks are more than sufficient. Purchasing of greengram at MSP in various states is not letting the prices to go down. After that market prices may fall slightly from current levels. As on 16th December 2022, 35.04 lakh hectares of greengram was sown compared to 35.70 lakh hectares last year in India (agricoop.nic.in). In Andhra Pradesh as on 28th December 2022, 0.35 lakh hectares of greengram was sown compared to 0.45 lakh hectares last year (apagrisnet.gov.in).

Under these circumstances, the AMIC, ANGRAU is here with providing the latest information with regard to the forecast price range of Rs. 6500-6800 for greengram in this Rabi marketing/harvesting season 2022-23.

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