

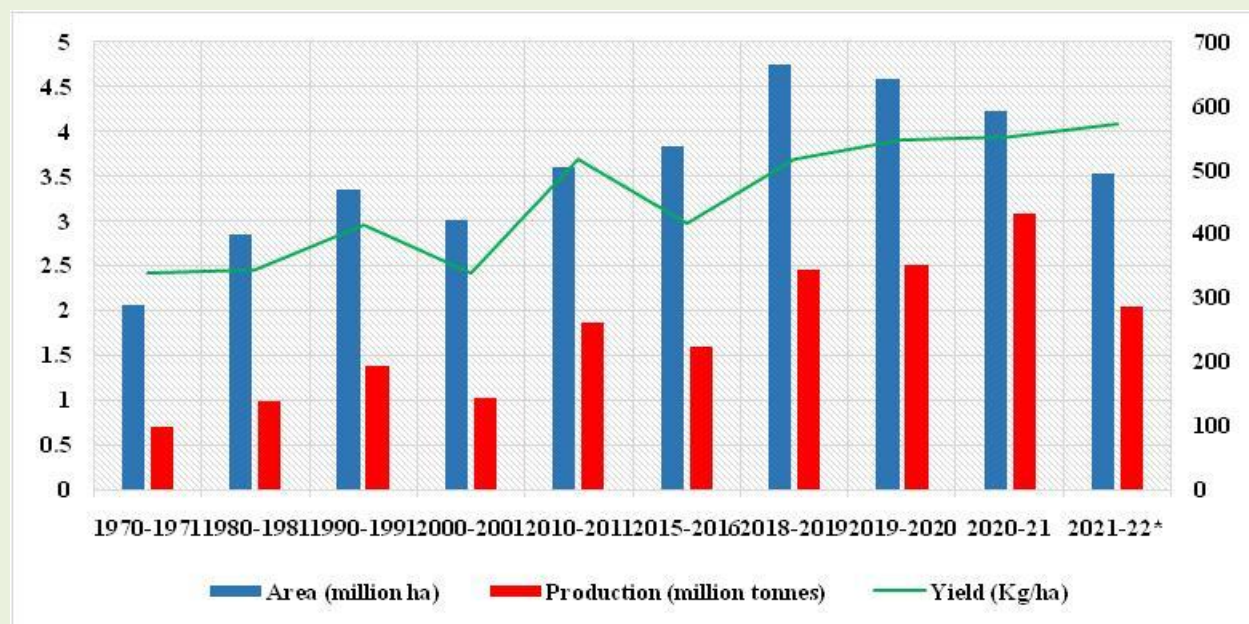
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Crop Outlook Reports of Andhra Pradesh

GREENGRAM– January to December 2021

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, * Kharif 2021

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 42.38 lakh hectares with a total production of 30.9 lakh tonnes with a productivity of 729.1 kg/ha and contributes 12% to the total pulse production in the year 2020-21 (Figure 1). In Kharif 2021-22, greengram production was 20.5 lakh tonnes (1st advance estimates) in an area of 35.25 lakh hectares (agricoop.nic.in). In Andhra Pradesh, greengram was cultivated in an area of 1.05 lakh ha with a production of 0.82 lakh tonnes, contributing 2.65% of production to country (Final Estimates, 2020-21). According to 2nd

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advance estimates during 2021-22, greengram was grown in 1.04 lakh hectares with a production of 0.84 lakh tonnes and productivity was 808 kg/ha.

As per some private sources (Table 1), in the marketing year 2021-22, the consumption of greengram was 24 lakh tonnes against the production of 23.25 lakh tonnes. The rest of the demand-supply gap was covered by importing around 2 lakh tonnes along with the opening stocks of 2.42 lakh tonnes.

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

Marketing Year (March to February)	2019-20	2020-21	2021-22*
Opening stocks	5.52	2.10	2.42
Production	19.06	21.42	23.25
Imports	0.59	1.50	2.00
Total Supply	25.17	25.02	27.67
Exports	0.07	0.10	0.20
Consumption	23.00	22.5	24.00
Total Demand	23.07	22.06	24.2
Ending stocks	2.10	2.42	3.47

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		
	A	P	A	P	A	P	A	P*	Y*
Andhra Pradesh	520	184	167	52	212	137	105	82	781
Bihar	187	108	172	104	169.2	94	110	73	664
Karnataka	451	185	402	111	348	44	440	162	369
Madhya Pradesh	90	23	99	35	295	131	157	117	741
Maharashtra	714	244	558	374	366	69	394	154	390
Rajasthan	458	79	1050	653	1364	597	2090	1170	560
India	3008	1023	3610	1862	3828	1593	4238	3090	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, 2020-21)

The important greengram producing state in the country is Rajasthan followed by Maharashtra, Karnataka, Madhya Pradesh, Andhra Pradesh, and Bihar (Table 2). Rajasthan and Madhya Pradesh states showed an increase in the area grown over the last two decades, while the

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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. 7196 in 2020-21.

Table3: 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	9496.71	4962.03	Karnataka and Maharashtra
2017-18	5575 (Kharif) and 5225 (Rabi)	407309	223141	Andhra Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Rajasthan and Telangana
2018-19	6975 (Kharif) and 5575 (Rabi)	306960	213506	Andhra Pradesh, Gujarat, Haryana, Karnataka, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, Tamil Nadu and Telangana
2019-20	7050 (Kharif) and 6975 (Rabi)	1646051	116871	Andhra Pradesh, Gujarat, Haryana, Karnataka, Maharashtra, Odisha, Rajasthan, Tamil Nadu and Telangana
2020-21*	7196 (Kharif) and 6975 (Rabi)	20842	14894	Andhra Pradesh, Gujarat, Haryana, Karnataka, Maharashtra, Odisha, Rajasthan, Tamil Nadu and Telangana

Source: Agricultural Statistics at a glance, 2020

* 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 2020-21, a total of 20842 tonnes were procured at a price of Rs. 7196 per quintal in kharif and Rs. 6975 per quintal in rabi, which has a value of Rs.14894 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		2020-21		2021-22*	
	AP	India	AP	India	AP	India	AP	India
Area (in '000 Ha)	278 (10.22%)	2720	211 (18.14%)	3828	106 (2.71%)	4238	105 (2.98%)	3525
Production (in '000 tonnes)	194 (16.30%)	1190	137 (11.60%)	1590	82 (2.65%)	3090	84 (4.09%)	2050

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Yield in Kg/Hectare	900	436	648	416	774	729	808	581
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Source: *agricoop.nic.in* – 2020-21, *des.ap.gov.in* 2012-13, 2015-16.

*1st advance estimates of India and 2nd advance estimates of 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 2.98 per cent which in 2021-22. The productivity has decreased from 900 kg/ha to 808 kg/ha.

Table 5: Major greengram producing districts in Andhra Pradesh (2019-20)

District	Area ('000 hectares)			Rank	Production ('000 tonnes)			Rank	Yield (Kg/ha)	Rank
	Kharif	Rabi	Total		Kharif	Rabi	Total			
Guntur	0	22	22	2	0	30	30	1	1339	1
Srikakulam	0	27	27	1	0	14	14	2	529	6
Vijayanagaram	1	12	13	3	1	8	9	3	719	5
West Godavari	0	7	7	5	0	9	9	4	1199	2
East Godavari	0	9	9	4	0	7	7	5	751	4
Krishna	2	4	6	6	2	4	6	6	976	3
Other districts	10	13	23		2	9	11		-	
Andhra Pradesh	13	94	107		5	81	86		806	

Source: *apagrisnet.gov.in*

Table 5 shows the major greengram producing districts in Andhra Pradesh in the year 2019-20. 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 production of greengram, with the highest productivity of 1339 kg/ha, which is higher than the state average of 806 kg/ha. These six districts together account for 87.2 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)	11281(22.86)
2	Material costs(Rs/ha)	19604(39.72)
3	Variable costs(Rs/ha)	30885(62.58)
4	Fixed costs(Rs/ha)	18465(37.42)
5	Total cost(Rs/ha)	49350(100)

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6	Yield (Qtl/ha)	10.15
7	Price (Rs./qtl)	6400
8	Gross returns (Rs/ha)	64960
9	Net returns (Rs/ha)	15610
10	Gross Margin (Rs/ha)	34075
11	Return on rupee BCR	1.32
12	Return on VC	2.10
13	Cost of Production (Rs./qtl)	4862.07

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 2020-21 is presented in Table 6. The cost of production in greengram was Rs. 4862.07/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. 34075 per ha and Rs. 15610 per ha respectively. Return on rupee BCR was 1.32, which is concerning for tenant farmers, and return on variable costs was 2.10, which is related to owner farmers.

Greengram Price Outlook:

Myanmar is offering greengram Anna Shewar at \$880 and greengram Padi Shewar at \$1000 and Pokako at \$980 per MT. As the domestic prices of pulses are increasing in the country, government of India has removed import duty on pulses till 31 March 2022 which may be extended till June 31, 2022.

Table 7: Market Prices vis-à-vis MSP of greengram in Major Producing States in KMS 2020-21 (Oct 2020 to Feb 2021)

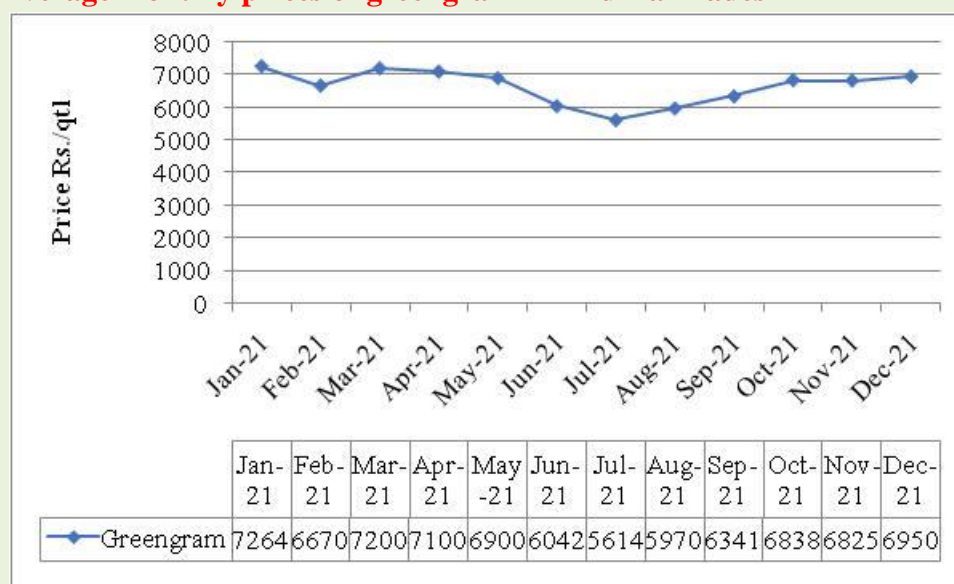
States	No. of days market prices reported	No. of days market prices were above MSP	No. of days market prices were below MSP				Average difference (%) between MSP & market price
			<5 %	5%-10%	10%-15%	>15 %	
Madhya Pradesh	100	1	8	36	44	11	-10.6
Maharashtra	127	46	5	18	17	41	-2.5
Rajasthan	143	2	9	56	61	15	-10.3

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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

During Kharif Marketing Season (KMS) 2020-21, market prices remained below Minimum Support Price (MSP) on most days in Madhya Pradesh, while prices were better in Madhya Pradesh and Rajasthan (Table 7). The average difference between market prices and MSP was (-)10.6 percent in Madhya Pradesh, (-) 10.3 percent in Rajasthan and (-)2.5 percent in Maharashtra.

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 2021 to December 2021. As per the information shared by Agricultural Market Intelligence Centre, ANGRAU, Sowing activities in southern states have disturbed due to rainfall. Supply side is at comfortable level while demand is weak and millers are not buying in bulk volume. As demand is low right now, prices are ruling below MSP in markets outside. In this situation, prices of greengram could not sustain its upward momentum. As on 3rd December 2021, 35.89 lakh hectares of greengram was sown compared to 36.02 lakh hectares last year in India (agricoop.nic.in). In Andhra Pradesh as on 29th December 2021, 0.45 lakh hectares of greengram was sown compared to 0.52 lakh hectares last year (apagrisnet.gov.in).

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Under these circumstances, the AMIC, ANGRAU is here with providing the latest information with regard to the forecast price range of Rs. 6700-7000 for greengram in this Rabi marketing/harvesting season 2021-22.
