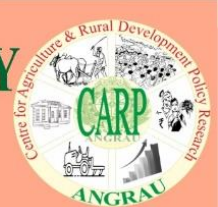




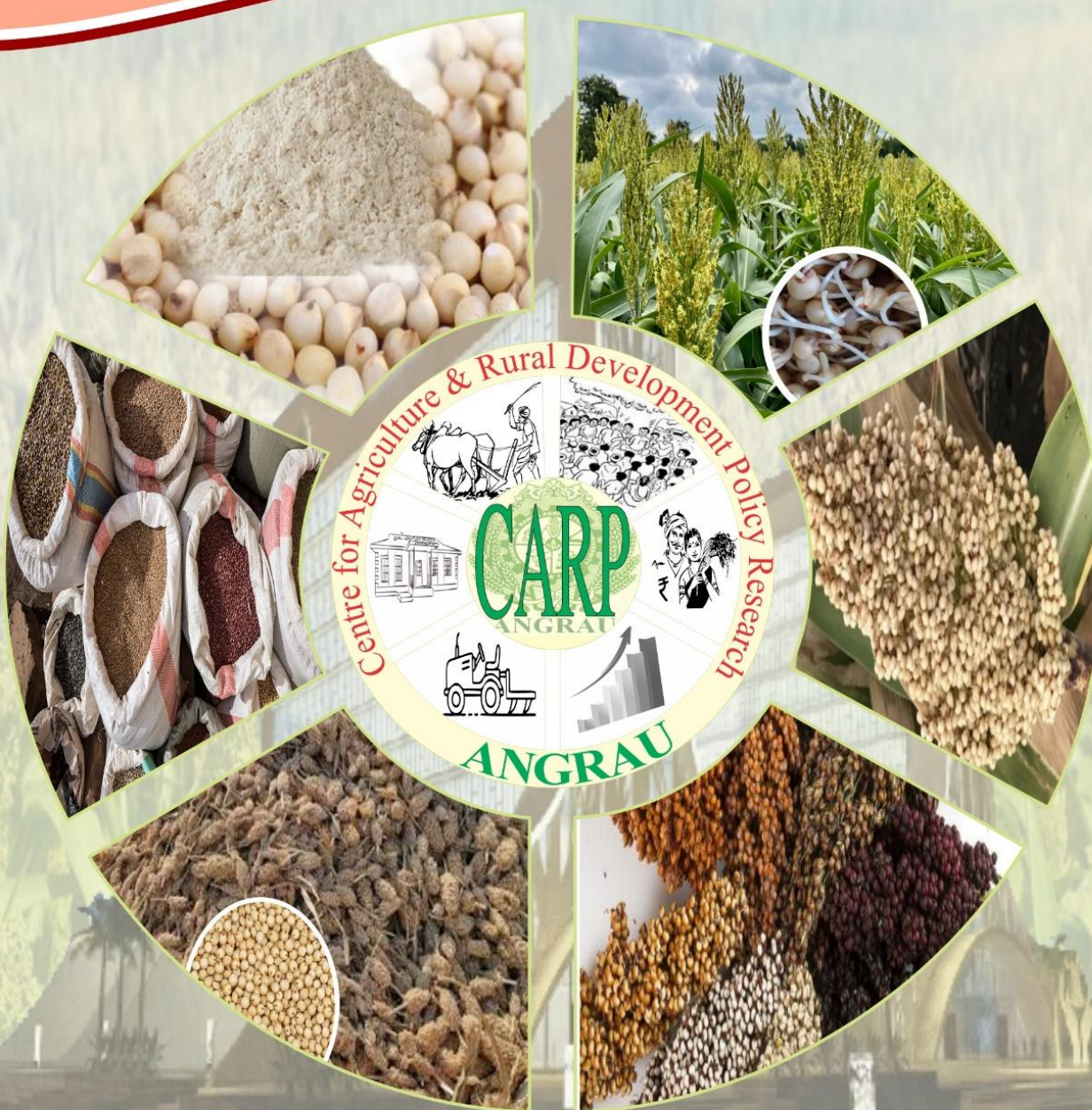
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Crop Outlook Reports of Andhra Pradesh

SORGHUM- 2025-26



Compiled and Edited

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In Nutshell.....

- Sorghum is cultivated in 67 countries across the world in 39.2 million ha (Mha) with 62 million tons (Mt) of production.
- Sudan has maximum area with 6 Mha followed by the Nigeria with 5.3 Mha, whereas, USA is the top producer (11 Mt) with 17.74 per cent stake.
- During 2025–26, China has highest Yield of 4.76 tons per hectare (t/ha) followed by the USA (4.55 t/ha) and the European Union (4.30 t/ha). While, India stands at 45th position (1.22 t/ha).
- In India, sorghum contributes about 1.16 per cent to the total food grain production.
- The major Sorghum-growing states are Maharashtra, Karnataka and Rajasthan. Though, Andhra Pradesh ranked 7th in area (0.12 Mha); with highest yields (3.71 t/ha) it stood at 3rd position in production (5.48 Mt).
- During 2025-26, India exported 42 thousand tons (Tt), valued at ₹ 150 crores. Major destinations were UAE (15 Tt), Saudi Arabia (7.32 Tt) and Bangladesh (7.05 Tt).
- In Andhra Pradesh, Nandyal district records the highest area with 40 thousand hectares (Tha) and production with 114 Tt, but relatively less in yield (2.83 t/ha). Higher yield was noticed in Guntur and Bapatla, whereas, Sri Sathya Sai and Anantha Puram districts having lower yields.
- Categorization of districts based on cross tabulation of growth and instability of area shows that 44 per cent area was under vulnerability zone followed by stagnant zone (36%).
- Sorghum is more profitable in kharif (BCR=1.29) than Rabi (BCR=1.11). Total Cost (₹/ha) in kharif was ₹60,019; the gross returns were ₹77,711. For rabi season, Total Cost was ₹ 55,885; the gross returns were ₹62,345.
- Agricultural Market Intelligence Centre (AMIC), ANGRAU forecasts the price (₹/q) range of 2,570 to 3,080 for kharif 2026 marketing season.

Global Scenario:

Sorghum, (*Sorghum bicolor*), cereal grain plant of the grass family (Poaceae) and its edible starchy seeds. It has numerous varieties, including grain Sorghum used for food; grass Sorghums grown for hay and fodder; and broomcorn used in making brooms and brushes. In India Sorghum is known as Jowar, Chulam and Jonna. Due to drought and heat tolerance, it is a significant crop in hot and arid regions. During 2025-26, global production is 62 million tonnes (Mt) during 2025-26 (USDA). United States is the leading country with 11 Mt (17.74%) followed by Nigeria with 6.6 Mt (10.64%), Brazil 4.76 Mt (7.67%) and India 4.4 Mt (7.09%).

Table 1. Global statistics for the 2025-26

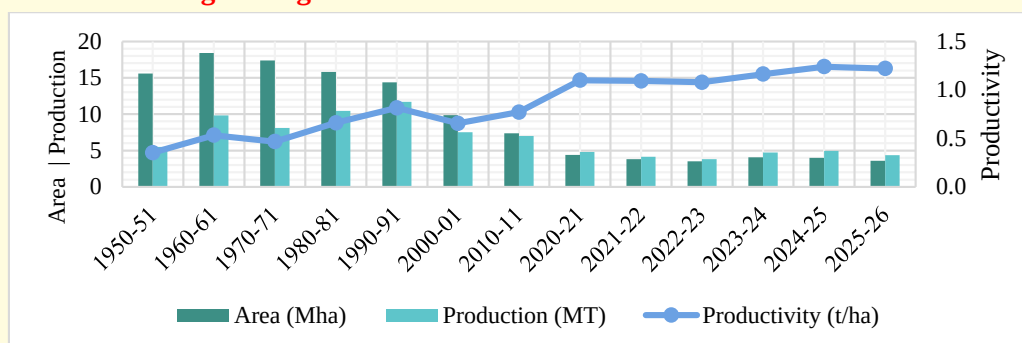
Area			Production			Yield		
Country	Mha	Rank	Country	Mt	Rank	Country	(t/ha)	Rank
Sudan	6.0	1	USA	11	1	China	4.76	1
Nigeria	5.3	2	Nigeria	6.6	2	USA	4.55	2
Niger	3.7	3	Brazil	6.2	3	EU	4.30	3
India	3.5	4	India	4.4	4	Argentina	4.17	4
USA	2.4	5	Ethiopia	4.0	5	Australia	3.84	5
World	39.2		World	62		India	1.22	24

Source: USDA estimates

National Scenario:

In India there was a significant decline in area over the past seven decades (decreased from 15.57 Mha to 3.58 Mha) (Fig 1). Despite the reduction in cultivated area, yield has increased from 0.35 t/ha to 1.22 t/ha, reflecting the impact of improved varieties and production technologies. However, production has remained relatively stable around 4- 5 Mt. The decline in area was off-set by yield increase, therefore maintaining stable production throughout the past periods.

Fig.1. Sorghum Production Statistics in India



Source: MoA&FW, GOI

In India during 2025–26, area was 3.55 Mha, production was 4.36 Mt with an average yield of 1.22 t/ha (Table 2). Maharashtra has the major share in the state in both area (1.50 Mha with 42.25 % share) and production (1.61 Mt with 36.92% share), followed by Karnataka (0.51 Mha) and Rajasthan (0.50 Mha). Though, Andhra Pradesh had less cultivated area (0.12 Mha), it had significant stake (9.86%) in national level with 0.43 Mt of production; owing to its highest yields (3.71 t/ha) at national level.

Table 2. Major Sorghum producing States during 2025-26
(Area - Mha, Production - Mt, Yield - t/ha)

State	Area	Share (%)	Production	Share	Yield
		in India		(%) in India	
Maharashtra	1.50	42.25	1.61	36.92	1.07
Karnataka	0.51	14.36	0.66	15.13	1.31
Rajasthan	0.50	14.08	0.31	7.11	0.61
Tamil Nadu	0.32	9.01	0.24	5.50	0.72
Uttar Pradesh	0.31	8.73	0.52	11.92	1.70
Telangana	0.17	4.78	0.41	9.40	2.41
Andhra Pradesh	0.12	3.38	0.43	9.86	3.71
All India	3.55	100	4.36	100	1.22

Source: UPAG (3rd advance estimates)

Note: States have been arranged in descending order of percentage share of area

On the other hand, the states those have major area had a less yield level *i.e.*, for Rajasthan (0.61 t/ha), Tamil Nadu (0.72 t/ha.) and Maharashtra (1.07 t/ha). The variance in sorghum yield among states emphasizes the need for state-specific interventions such as greater seed adoption, more efficient input management and stronger extension services. With less elasticity in area under sorghum cultivation, improving yield in major sorghum growing states leads to a significant rise in national average.

Table 3. Indian Sorghum exports (Top 10 countries) during 2025-26.

Country	Quantity (000't)	Value (₹crore)
UAE	15.00	58.26
Saudi Arabia	7.32	24.11
Bangladesh	7.05	18.78
Kuwait	2.41	7.95
Chinese Taipei	1.70	5.94
Qatar	1.50	5.50
Japan	1.06	4.28
Philippines	0.91	4.19
Oman	0.88	2.88
Bahrain	0.67	2.80
World	42	150

Source: ITC:Trademap

During 2025-26, the UAE is the major export destination both in quantity and value terms *i.e.*, 15 thousand tons (Tt) and ₹58.26 crores respectively followed by the Saudi Arabia, Bangladesh and Kuwait (Table 3). Overall, India exported 42 Tt of Sorghum valued at ₹150 crore.

Table 4. Balance sheet of Sorghum for India

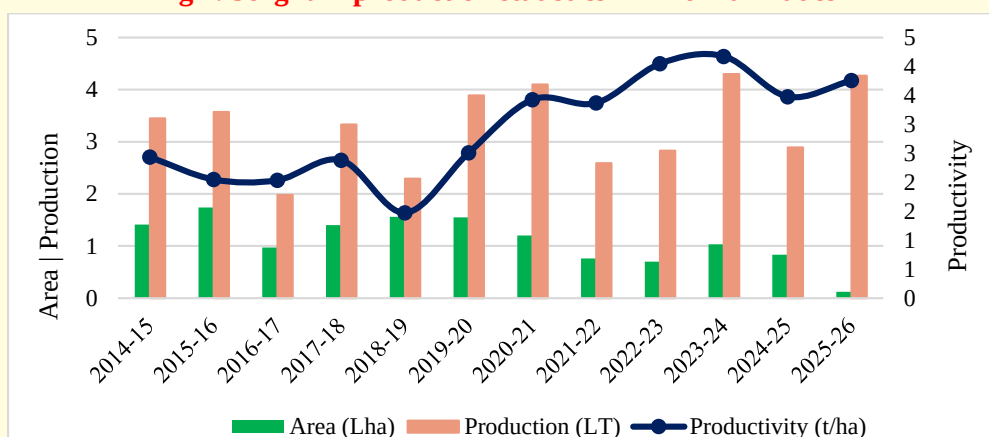
Particulars	2024-25	2025-26*
Opening stocks	0.23	0.45
Production	4.95	4.60
Imports	0	0
Total supply	5.19	5.04
Export	0.04	0.05
Domestic consumption	5.75	4.75
Total Demand	5.79	4.80
Ending Stock	0.44	0.24
Stock Use Ratio	7.71%	5.14%

Source: *fas.usda.gov*, * estimates

India's sorghum balance sheet indicates a relatively tight market during 2025–26. Total supply is projected to decline from 5.19 Mt to 5.04 Mt during 2024–25 to 2025–26, owing to lower production. Domestic consumption is also expected to decrease from 5.75 Mt to 4.75 Mt, while exports are projected to increase marginally from 0.04 Mt to 0.05 Mt. Consequently, ending stocks are estimated to decline from 0.44 Mt to 0.24 Mt, reducing the stock-to-use ratio from 7.71 per cent to 5.14 per cent, indicating tighter market availability and the likelihood of firm domestic prices. The declining stock-to-use ratio highlights the need to enhance sorghum yields in order to strengthen the domestic production and maintaining adequate market supplies. Improving yield through location-specific technologies and efficient supply chain management will be crucial to ensuring price stability and food-feed security.

State Scenario:

In Andhra Pradesh, Sorghum is growing in both Kharif and Rabi seasons. It accounts for 1.16 per cent of the total food grain cropped area in the state. During 2014-15 to 2025-26, though, area declined (-12.82 %), it was counter-balanced by tremendous increase in yields (7.24%) resulting in increase in production (1.93%) (Fig 2). This reveals that growth in production was led by growth in yield.

Fig 2. Sorghum production statistics in Andhra Pradesh

Source: DES.AP

In Andhra Pradesh during 2025–26, Nandyal is the leading district with an area of 40.41 thousand hectares (Tha), production of 114 Tt (Table 6). Other major districts are Guntur, Bapatla, Anantha Puram etc. Guntur records the highest yield (7.18 t/ha), followed by Bapatla (6.47 t/ha), Krishna (4.56 t/ha) etc., with least in Sri Sathya Sai (0.30 t/ha) reflecting substantial inter-district variations in yield. These yield differences highlight the need for district-specific interventions to improve yield in low-performing areas through enhanced adoption of improved varieties and scientific crop management practices.

Table 6: Major Sorghum producing Districts (Top 5) during 2025-26
(Area – 000' ha, Production- 000' tons, Yield - t/ha)

Districts	Area @	Production*	Yield [#]
Nandyal	40.41	114	2.83
Guntur	19.56	140	7.18
Kurnool	16.57	21	1.29
Bapatla	9.91	64	6.47
Anantha Puram	9.72	8	0.83
Andhra Pradesh	112	418	3.74

Source: District hand books, DES, A.P. (@3rd advance estimates)

(*Estimated by CARP) ([#] yield averages TE 2024-25)

Note: Districts have been arranged in descending order based on area.

During 2020–21 to 2025–26, Growth–Instability Matrix (GIM) (*refer paddy Outlook Report- June to May 2025-26*) analysis revealed that the majority area (44%) is in vulnerable stage (N.T.R, Guntur, Bapatla, Prakasam, Kurnool districts), followed by 36 per cent (Nandyal) in stagnant zone and 17 per cent (Krishna, Ananthapuram, Y.S.R. Kadapa) is under risky expansion (Table 7). Whereas, no district is under the desirable and sustainable category. The results suggest the need for targeted interventions to stabilize Sorghum area expansion while sustaining growth in high-potential districts.

Table 7: Categorisation of districts based on growth and instability of area during 2020-21 to 2025-26

		CGR	
		< 4% (Low)	> 4% (High)
CV	< 20% (Low)	Nandyal (35.71%)	-
	> 20% (High)	N.T.R, Guntur, Bapatla, Prakasam, Kurnool (44.45%)	Krishna, Ananthapuram, Y.S.R. Kadapa (17.37%)

Note: Values in parentheses represent percentage of in state total area, 2025-26

Primary data from farmers was collected for estimation of costs and returns (₹/ha) in Sorghum cultivation. During Kharif' 2025 the total cost of cultivation (Cost C2) was ₹60,019 (Table 8). The total variable cost amounted to ₹47,095, while fixed costs were ₹12,924. In variable cost, Labour cost had major share (58.9%) with ₹27,750 and material cost (41.1%) with ₹12,887. The average yield was 22.63 q/ha, with a market price (₹/q) of 3,434, resulting in gross returns of ₹77,711. Net return was ₹17,692. The benefit–cost (BC) ratio on variable and total cost were 1.65 and 1.29 respectively indicating sustained profitability.

During Rabi' 2025-26, Total Cost was ₹55,885. Labour cost constituted the major share at ₹19,355 (35%) followed by material cost of ₹18,130 (32%). The total variable cost was ₹45,337, while fixed costs were ₹10,548. The average yields were outrageously at 26.53 q/ha, whereas, market price was down to 2,350₹/q, resulting in gross returns of ₹62,345. Net return was ₹6,460. BCR on variable and total cost were 1.37 and 1.11 respectively. Kharif-Sorghum is more profitable than Rabi-Sorghum. Though yields were high in rabi, prices were very less comparatively. Hence, profits were price-led.

Table 8: Cost-return structure of Sorghum in Andhra Pradesh 2025-26 (₹/ha)

Particulars	Value (₹)	
	Kharif	Rabi
Labour cost	27,750	19,355
Material cost	12,887	18,130
Variable cost (VC)	47,095	45,337
Fixed Costs (FC)	12,924	10,548
Total Cost (Cost C2)	60,019	55,885
Yield (q/ha)	22.63	26.53
Price (₹/q)	3,434	2,350
Gross Returns (GR)	77,711	62,345
Net Returns (NR)	17,692	6,460
BCR on VC	1.65	1.37
BCR on TC	1.29	1.11

Source: Survey Data (2025-26)

Price outlook:

Seasonal index analysis indicates that Sorghum arrivals are highly seasonal, peaking in November (198.12) and January (216.91) following the harvest period, while arrivals remain considerably below the annual average during February, July and September (Table 9). In contrast, Sorghum prices exhibited relatively low seasonal variation, with the highest seasonal index recorded in June (106.96) and the lowest in February (88.83). Prices remain fairly stable throughout the year despite substantial fluctuations in market arrivals, indicates that there was natural mechanism to off-set the price fluctuations.

Table 9: Seasonal Indices of Sorghum in Andhra Pradesh (2025-26)

Months	Arrivals		Price	
	Tons	Seasonal Index	₹/q	Seasonal Index
Jun-25	4,662	123.23	2,408	106.96
Jul-25	550	14.54	2,381	105.79
Sep-25	600	15.86	2,100	93.28
Nov-25	7,495	198.12	2,365	105.08
Dec-25	4,482	118.47	2,385	105.96
Jan-26	8,206	216.91	2,118	94.09
Feb-26	487	12.87	2,000	88.83
Yearly average	3,783	100	2,251	100

Source: Agmark net

As per the estimates given by Agricultural Market Intelligence Centre (AMIC), ANGRAU, for marketing season of Kharif '2026, the forecast prices (₹/q) are ₹ 2,570 to ₹ 3,080. While, Minimum Support Price (MSP) was ₹ 4,349.
