

Groundnut Cultivation in Major States: Current Status and Strategic Approaches to Meet Seed Demand



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All India Coordinated Research Project on Groundnut
ICAR-Directorate of Groundnut Research,
(An ISO 9001 : 2015 Certified Institute)
At & Post: Ivnagar Road, Junagadh 362 015, Gujarat, India



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Preface

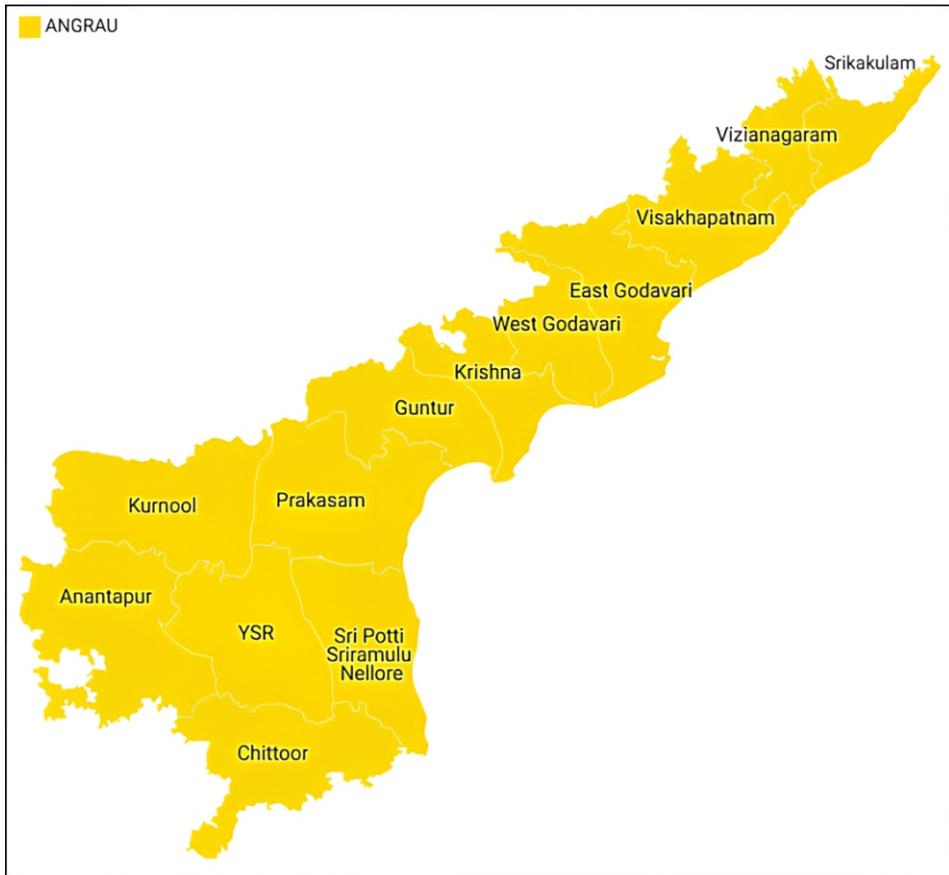
Agriculture remains a cornerstone of India's economy, with groundnut cultivation being a key component of the oilseed sector. This bulletin provides an extensive overview of the status and trends in groundnut farming across all states in India. It aims to equip stakeholders with critical insights and data necessary for making informed decisions and implementing effective strategies to enhance groundnut production. India's diverse agricultural landscape, comprising numerous states with varying climatic and soil conditions, presents opportunities and challenges for groundnut cultivation. This bulletin aggregates and analyses data from each state, offering a comprehensive view of regional differences and trends in groundnut farming. By presenting district-level data, we highlight the specific agricultural dynamics of each region. The bulletin captures the significant trends over the past decade. A critical component of this bulletin is the detailed roadmap for meeting seed requirements across different states. It provides insights into the average area under cultivation for *Kharif* and *Rabi*/Summer seasons, along with estimates for seed pod, certified seed, and breeder seed requirements. This strategic approach is designed to support a 30% Seed Replacement Rate (SRR), ensuring the availability of quality seeds for effective groundnut cultivation. The bulletin includes a comprehensive list of groundnut varieties recommended for each state, based on extensive research and field trials. These varieties are selected for their adaptability to local conditions, yield potential, and disease resistance. The recommendations aim to guide farmers in choosing the most suitable varieties to maximize their productivity and resilience. Identifying and utilizing potential areas for groundnut expansion is crucial for enhancing national production. The bulletin outlines regions with favorable conditions for increasing groundnut cultivation, providing a strategic framework for expanding the area under groundnut farming. This bulletin serves as a vital resource for farmers, agricultural extension officers, researchers, and policymakers across India. By consolidating data and insights from all states, it provides a holistic view of the challenges and opportunities in groundnut cultivation. We hope this document will facilitate informed decision-making and drive efforts towards revitalizing and expanding groundnut farming across the country. Lastly, we express our gratitude to all contributors and stakeholders whose valuable input and collaboration have made this bulletin possible.

Authors

Contents

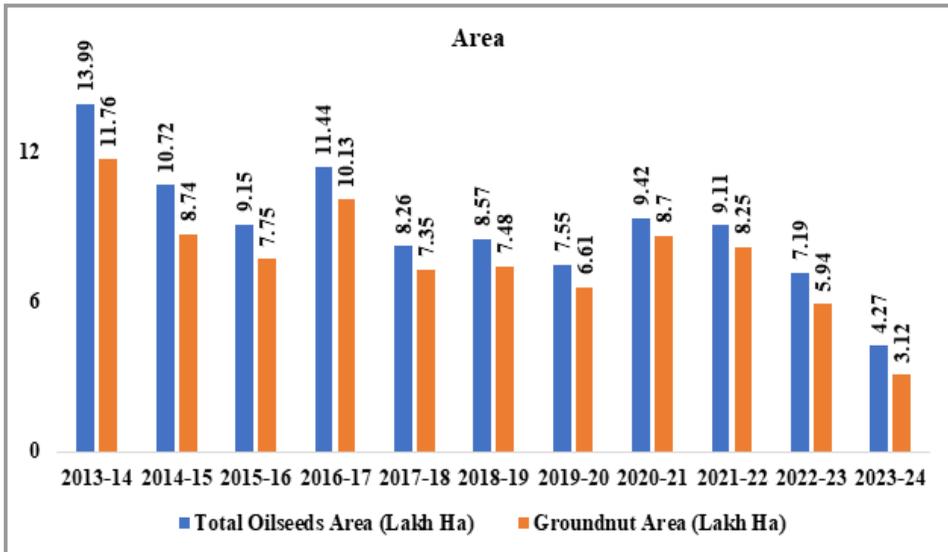
S. No.	Particulars	Page No.
1	Andhra Pradesh	01-03
2	Telangana	04-06
3	Gujarat	07-09
4	Karnataka	10-12
5	Tamil Nadu	13-15
6	West Bengal	16-18
7	Rajasthan	19-21
8	Madhya Pradesh	22-24
9	Maharashtra	25-27
10	Odisha	28-30
11	Uttar Pradesh	31-33
12	Chhattisgarh	34-36
13	Strategies for enhancing seed production	37-38

1. ANDHRA PRADESH

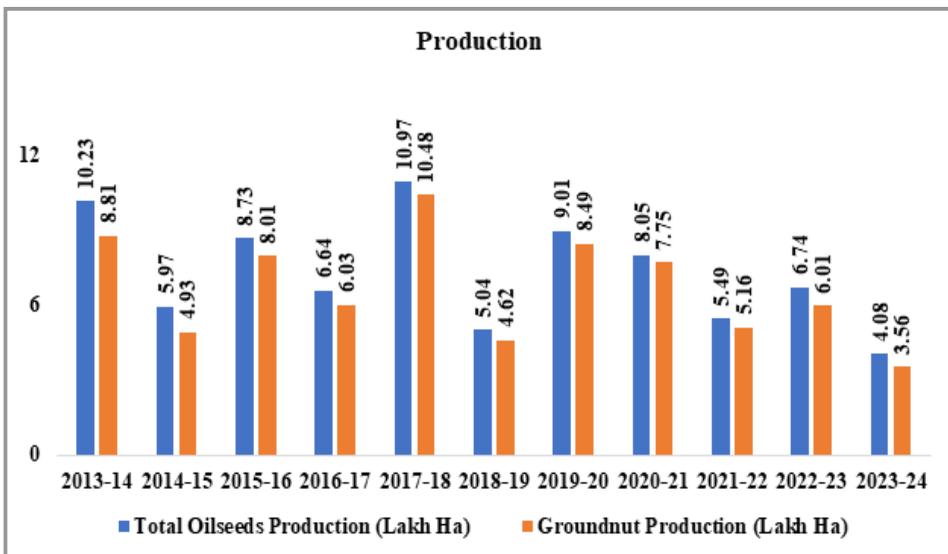


ANGRAU: Acharya N. G. Ranga Agricultural University, Guntur

Fig 1. Territorial Jurisdiction under State Agricultural Universities in Andhra Pradesh



Change in Area in last 10 Years:
 Total Oilseeds - 69.5% Decline; Groundnut - 73.5% Decline



Change in Production in last 10 Years:
 Total Oilseeds - 60.1% Decline; Groundnut - 59.6% Decline

Fig 2. Decadal Area and Production Trend of Total Oilseeds and Groundnut in Andhra Pradesh

1.1 Road map for meeting seed requirement of groundnut

	<i>Kharif</i>	<i>Rabi-Summer</i>	Total
Area (in lakh ha) (avg of 2019-24)	5.55	0.97	6.52
Seed pod requirement @1.5 q/ha (in lakh q)	8.33	1.46	9.79
*Certified seed requirement (in lakh q)	2.49840	0.43740	2.93580
Breeder seed requirement (in lakh q)	0.02498	0.00437	0.02936
Breeder seed requirement (in q)	2498	437	2936

*Based on 30% SRR (Seed Replacement Rate) and 1:10 SMR (Seed Multiplication Ratio)

1.2 Varieties recommended for Andhra Pradesh

<i>Kharif</i>	KDG 128, KDG 123, Kadiri Amaravathi (K 1535), GJG 32 (ICGV 03043), Phule Dhani (JL 1085), Dheeraj (TCGS 1073), Dh 256, Girnar 4 (ICGV 15083), Girnar 5 (ICGV 15090), K 1812 (Kadiri Lepakshi), GG 40 (Gujarat Groundnut 40) (ICGV 16668), Visishta (TCGS 1694)
<i>Rabi-/summer</i>	ALG 06-320, GJG 33 (ICGV 07222), Phule Chaitanya (Central- KDG 160), Dheeraj (TCGS 1073), Central-Pragati (TCGS 894), K 1719 (Kadiri Chithravathi), Visishta (TCGS 1694)

1.3 Potential districts for enhanced groundnut seed production

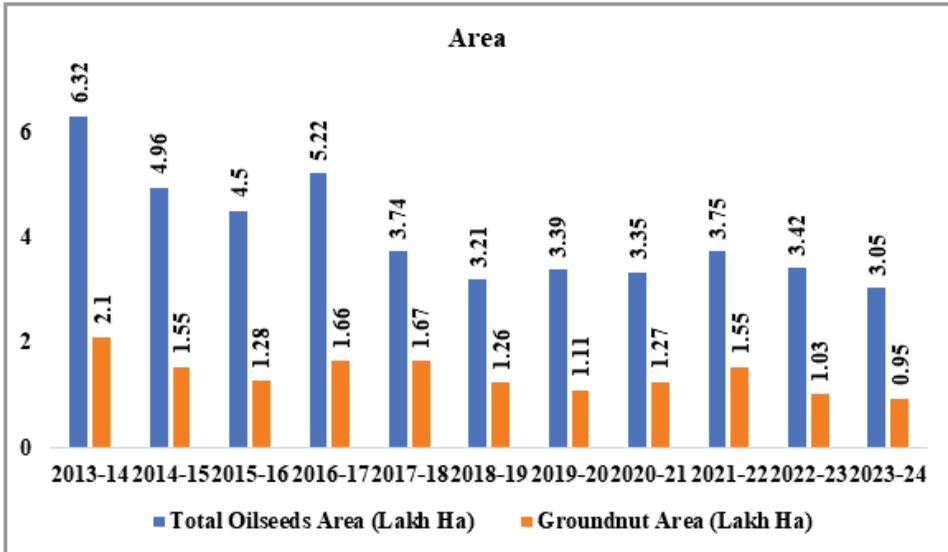
<i>Kharif</i>	<i>Rabi/Summer</i>
Anantapur, Kurnool, Kadapa, Vizianagaram, Srikakulam, Visakhapatnam, West Godavari, Chittoor	Nellore, Prakasam, Guntur, West Godavari, Krishna, East Godavari, Srikakulam, and Visakhapatnam

2. TELANGANA

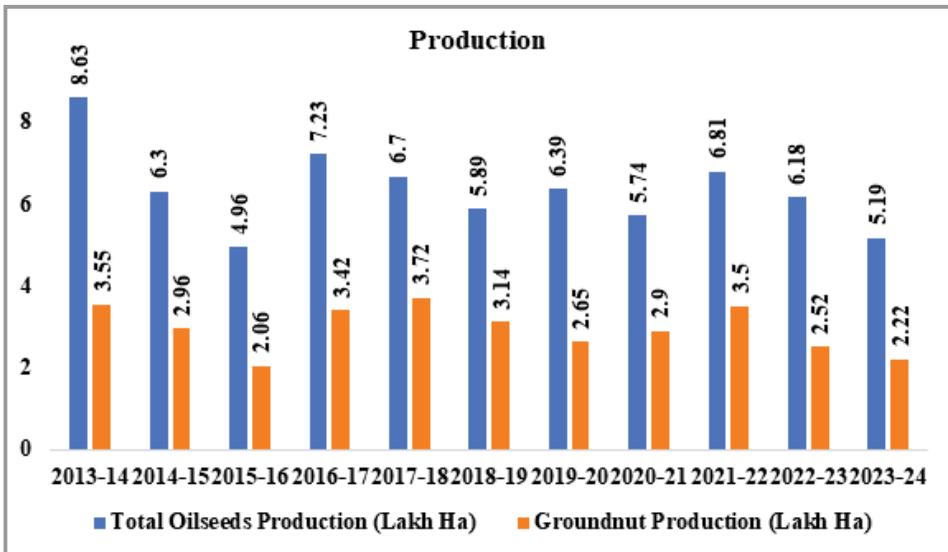


PJTSAU : Professor Jayashankar Telangana State Agricultural University,
Hyderabad

**Fig 3. Territorial Jurisdiction under State Agricultural Universities
in Telangana**



Change in Area in 10 Years:
 Total Oilseeds – 51.7% Decline; Groundnut – 54.8% Decline



Change in Production in 10 Years:
 Total Oilseeds – 39.9% Decline; Groundnut – 37.5% Decline

Fig 4. Decadal Area and Production Trend of Total Oilseeds and Groundnut in Telangana

2.1 Road map for meeting seed requirement of groundnut

	<i>Kharif</i>	<i>Rabi-Summer</i>	Total
Area (in lakh ha) (avg of 2019-24)	0.11	1.07	1.18
Seed pod requirement @1.5 q/ha (in lakh q)	0.17	1.60	1.77
*Certified seed requirement (in lakh q)	0.05130	0.48060	0.53190
Breeder seed requirement (in lakh q)	0.00051	0.00481	0.00532
Breeder seed requirement (in q)	51	481	532

*Based on 30% SRR (Seed Replacement Rate) and 1:10 SMR (Seed Multiplication Ratio)

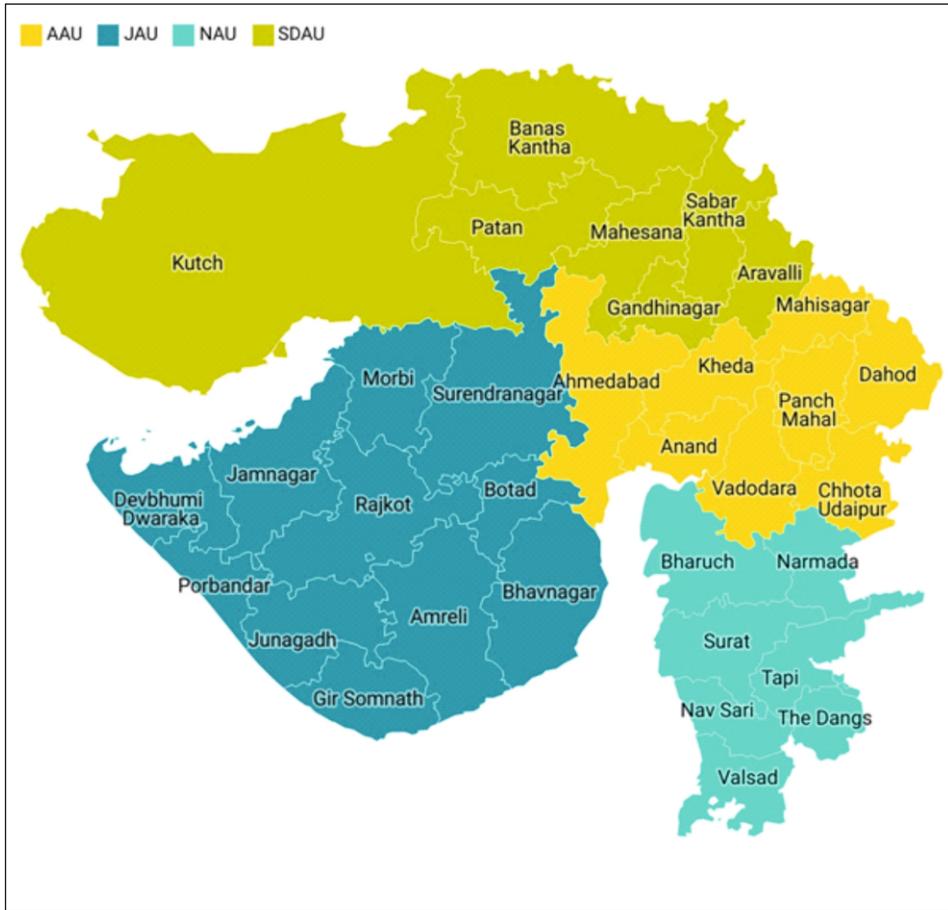
2.2 Varieties recommended for Telangana

<i>Kharif</i>	KDG 128, KDG 123, Kadiri Amaravathi (K 1535), GJG 32 (ICGV 03043), Phule Dhani (JL 1085), Dheeraj (TCGS 1073), Dh 256, Girnar 4 (ICGV 15083), Girnar 5 (ICGV 15090), Jagtial Palli 1 (JGC 2141), K 1812 (Kadiri Lepakshi), GG 40 (Gujarat Groundnut 40) (ICGV 16668)
<i>Rabi-/summer</i>	ALG 06-320, GJG 33 (ICGV 07222), Phule Chaitanya (Central- KDG 160), Dheeraj (TCGS 1073), Central-Pragati (TCGS 894), Jagtial Palli 1 (JGC 2141), K 1719 (Kadiri Chithravathi)

2.3 Potential districts for enhanced groundnut seed production

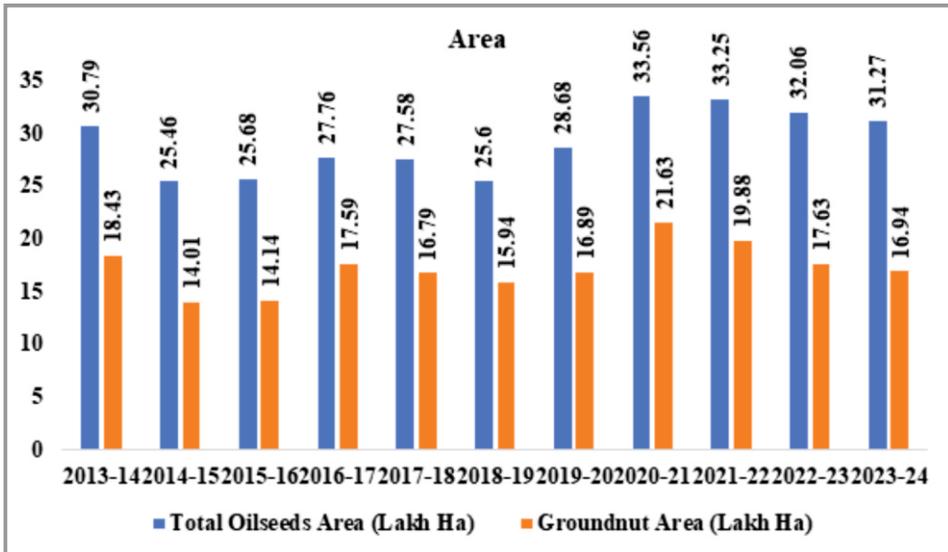
<i>Kharif</i>	<i>Rabi/Summer</i>
Jogulamba Gadwal, Nagarkurnool, Wanaparthy, Mahabubnagar, Suryapet, Warangal	Nagarkurnool, Wanaparthy, Vikarabad, Mahabubnagar, Nalgonda, Jogulamba Gadwal, Narayanapet

3. GUJARAT



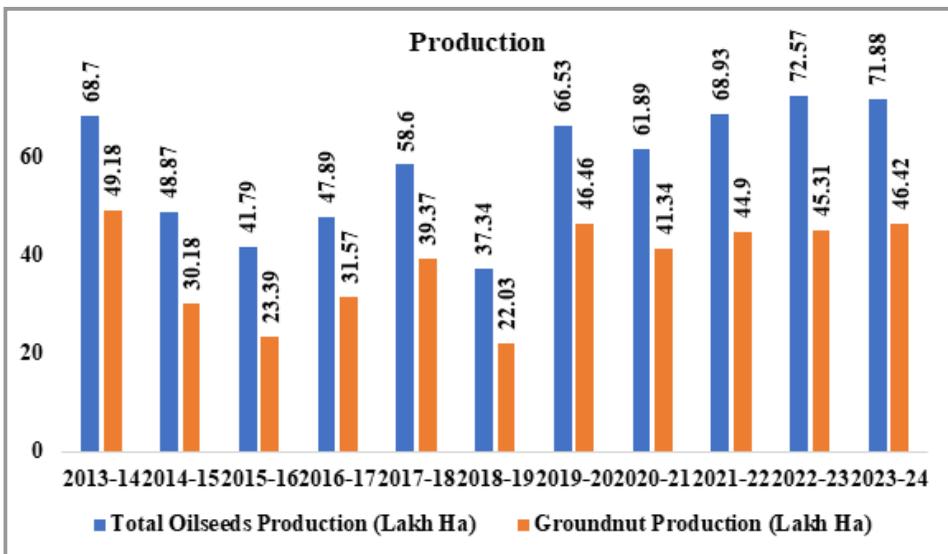
- AAU** : Anand Agricultural University, Anand
JAU : Junagadh Agricultural University Junagadh
NAU : Navsari Agricultural University, Navsari
SDAU : Sardarkrushinagar Dantiwada Agricultural University, Sardarkrushinagar, Dantiwada

Fig 5. Territorial Jurisdiction under State Agricultural Universities in Gujarat



Change in Area in 10 Years:

Total Oilseeds – 1.6% Increase; Groundnut – 8.1% Decline



Change in Production in 10 Years:

Total Oilseeds – 4.6% Increase; Groundnut – 5.6% Decline

Fig 6. Decadal Area and Production Trend of Total Oilseeds and Groundnut in Gujarat

3.1 Road map for meeting seed requirement of groundnut

	<i>Kharif</i>	<i>Rabi-Summer</i>	Total
Area (in lakh ha) (avg of 2019-24)	18.00	0.59	18.59
Seed pod requirement @1.5 q/ha (in lakh q)	27.00	0.88	27.89
*Certified seed requirement (in lakh q)	8.10090	0.26460	8.08366
Breeder seed requirement (in lakh q)	0.08101	0.00265	0.08366
Breeder seed requirement (in q)	8101	265	8366

*Based on 30% SRR (Seed Replacement Rate) and 1:10 SMR (Seed Multiplication Ratio)

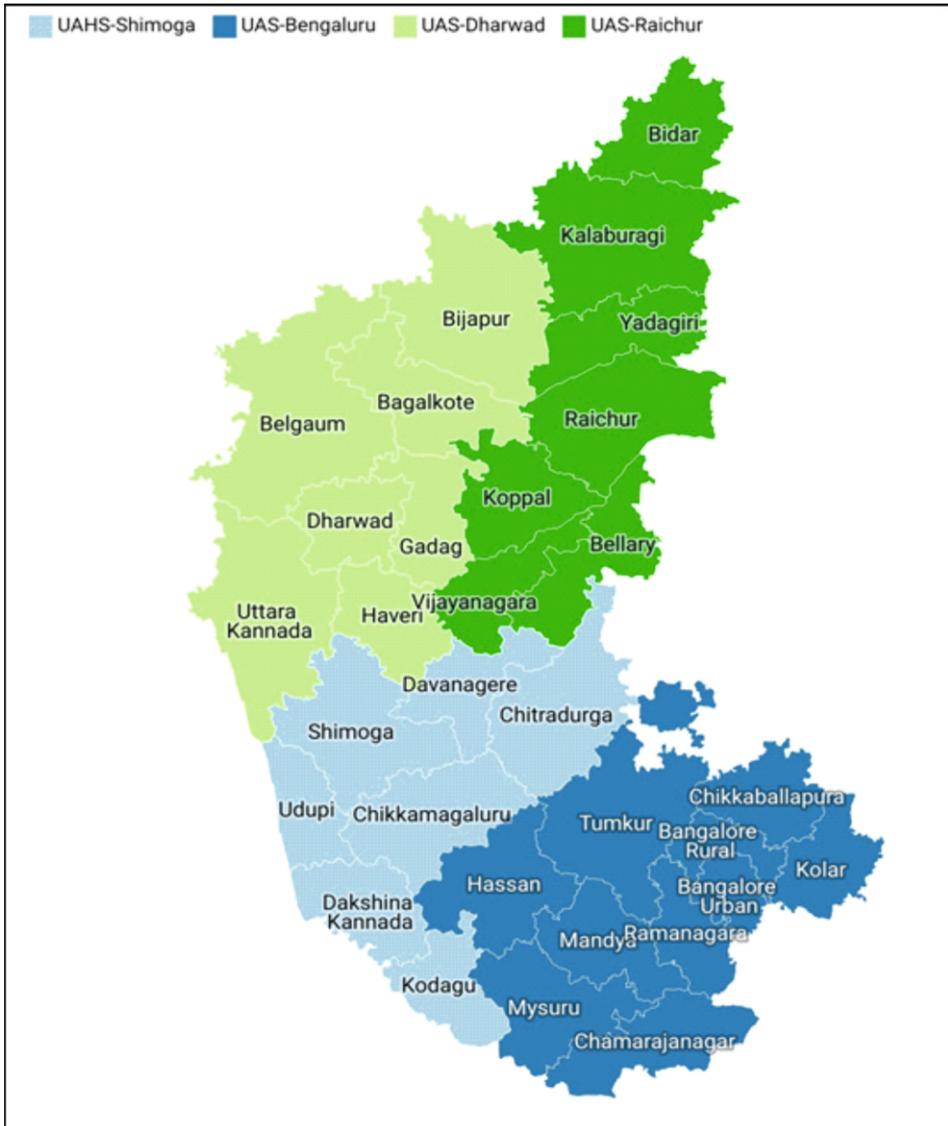
3.2 Varieties recommended for Gujarat

<i>Kharif</i>	KDG 128, KDG 123, GJG 32 (ICGV 03043), Gujarat Groundnut HPS 2 (GG HPS 2), Girnar 4 (ICGV 15083), Girnar 5 (ICGV 15090), Gujarat Groundnut 41 (Padma), Gujarat Groundnut 35 (Sorath Gold), Gujarat Groundnut 23 (Sorath Kiran), GG 40 (Gujarat Groundnut 40) (ICGV 16668), Gujarat Groundnut 38 (Sorath Navin), ICAR-VRI 11
<i>Rabi-/summer</i>	Gujarat Groundnut-34 (GG 34) (AG-2012-06), Gujarat Groundnut 37 (Sorath Gaurav)

3.3 Potential districts for enhanced groundnut seed production

<i>Kharif</i>	<i>Rabi/Summer</i>
Kutch, Bhavnagar, Surendranagar, and Porbandar.	Bhavnagar, Surendranagar, Botad, Morbi,

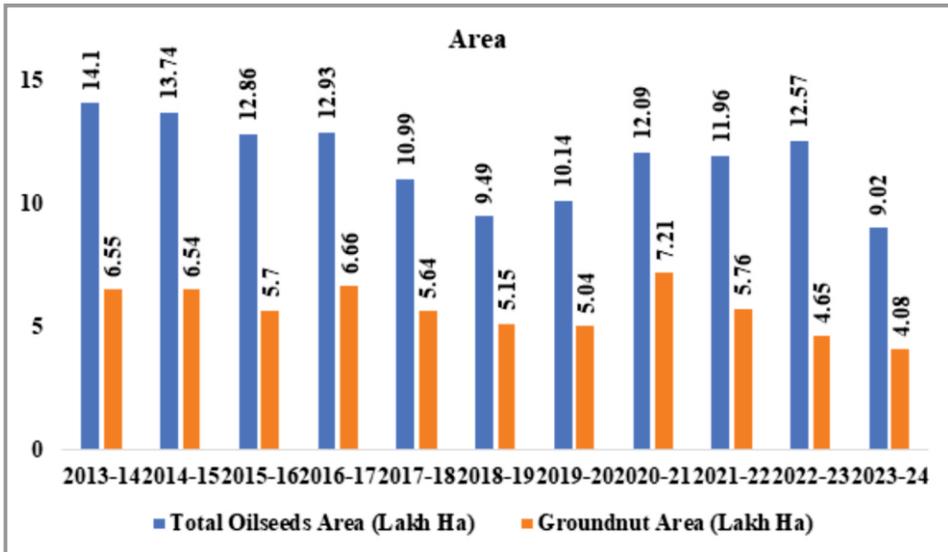
4. KARNATAKA



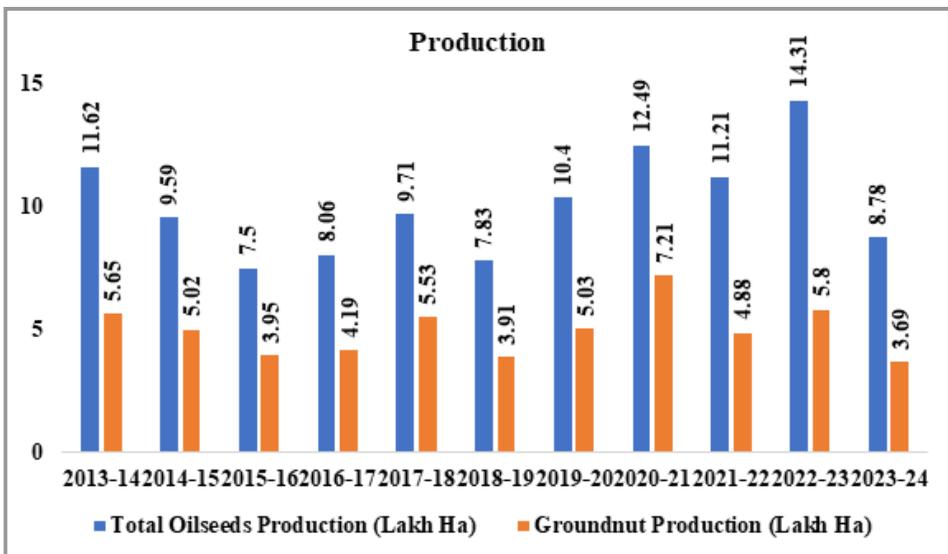
UAS : University of Agricultural Sciences (Dharwad, Raichur, Bengaluru)

UAHS : University of Agricultural and Horticultural Sciences, Shimoga

Fig 7. Territorial Jurisdiction under State Agricultural Universities in Karnataka



Change in Area in 10 Years:
 Total Oilseeds – 36% Decline; Groundnut – 37.7% Decline



Change in Production in 10 Years:
 Total Oilseeds – 24.4% Decline; Groundnut – 34.7% Decline

Fig 8. Decadal Area and Production Trend of Total Oilseeds and Groundnut in Karnataka

4.1 Road map for meeting seed requirement of groundnut

	<i>Kharif</i>	<i>Rabi-Summer</i>	Total
Area (in lakh ha) (avg of 2019-24)	3.68	1.19	4.87
Seed pod requirement @1.5 q/ha (in lakh q)	5.52	1.97	7.31
*Certified seed requirement (in lakh q)	1.65690	0.53550	2.19240
Breeder seed requirement (in lakh q)	0.01657	0.00536	0.02192
Breeder seed requirement (in q)	1657	536	2192

*Based on 30% SRR (Seed Replacement Rate) and 1:10 SMR (Seed Multiplication Ratio)

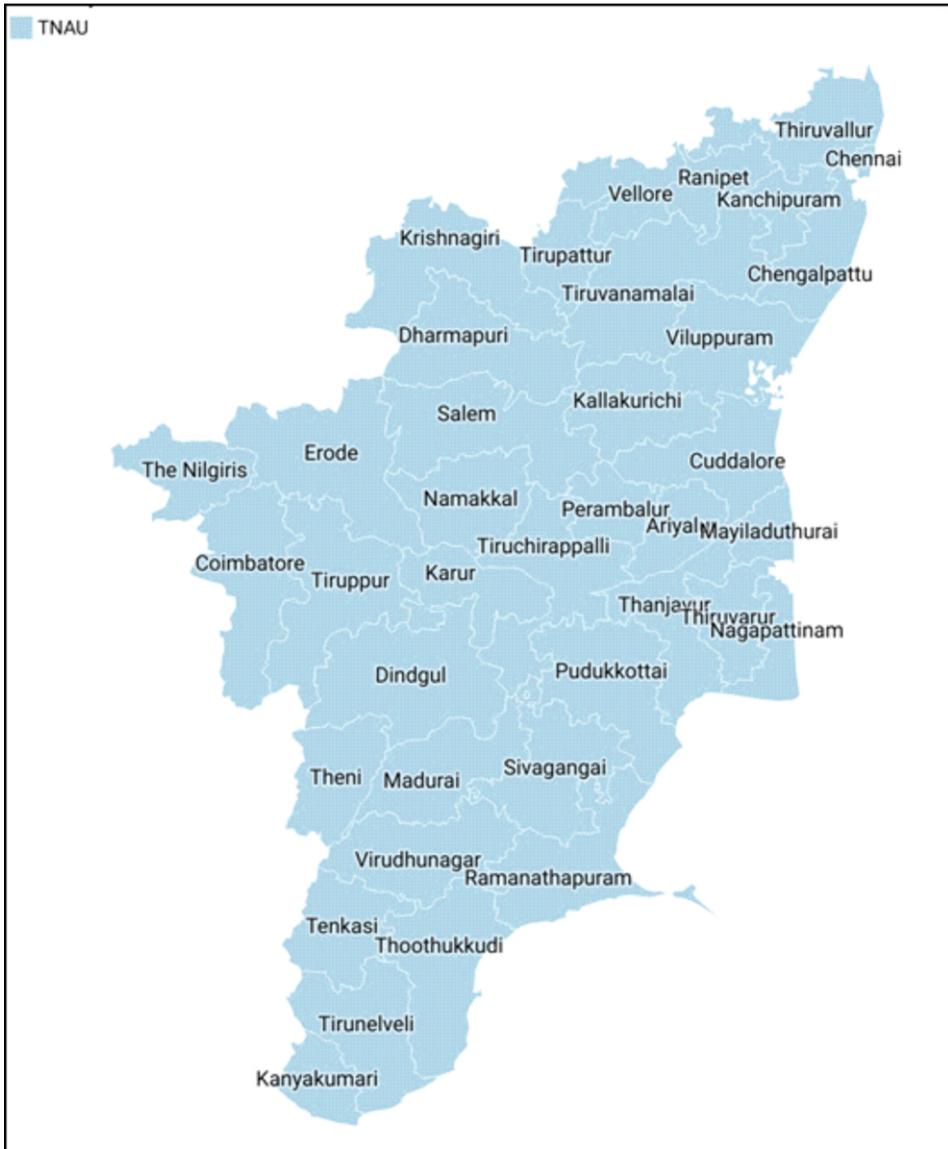
4.2 Varieties recommended for Karnataka

<i>Kharif</i>	G2-52, KDG 128, KDG 123, GKVK 5, GJG 32 (ICGV 03043), DH 232, DH 245, Phule Dhani (JL 1085), Dh 256, Girnar 4 (ICGV 15083), Girnar 5 (ICGV 15090), ICGV 06189, K 1812 (Kadiri Lepakshi), GG 40 (Gujarat Groundnut 40) (ICGV 16668), Improved JL 24 (DBG 3), Super TMV 2 (DBG 4), Dh-256
<i>Rabi-/summer</i>	KCG 6, GKVK 5, Dh 257, Dh-256

4.3 Potential districts for enhanced groundnut seed production

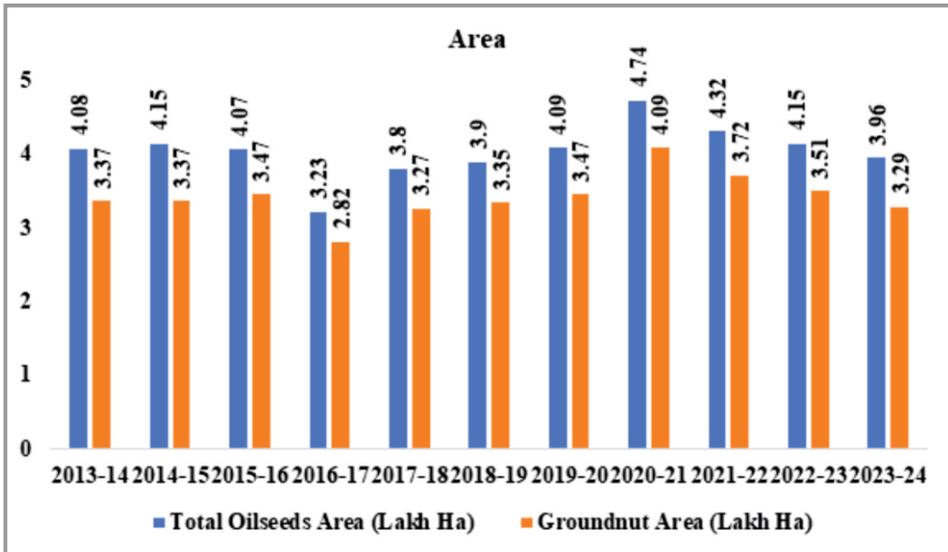
<i>Kharif</i>	<i>Rabi/Summer</i>
Dharwad, Bellary, Raichur, Gulbarga, Gadag, Haveri, Koppal, and Belgaum	Tumkur, Chitradurga, Chikmagalur, Hassan, Mandya, Kolar, Ramanagara, and Bangalore Rural

5. TAMIL NADU



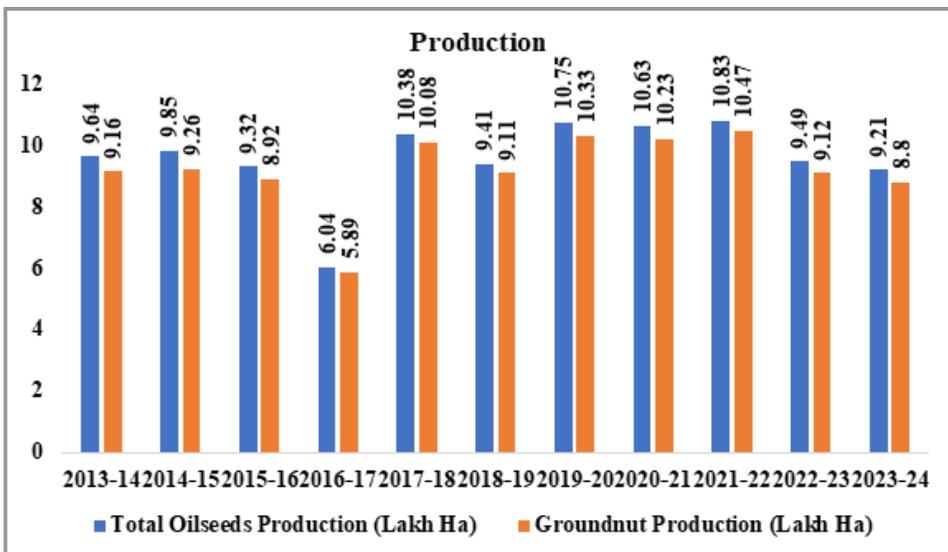
TNAU: Tamil Nadu Agricultural University, Coimbatore

Fig 9. Territorial Jurisdiction under State Agricultural Universities in Tamil Nadu



Change in Area in 10 Years:

Total Oilseeds – 2.9% Decline; Groundnut – 2.4% Decline



Change in Production in 10 Years:

Total Oilseeds – 4.5% Decline; Groundnut – 3.9% Decline

Fig 10. Decadal Area and Production Trend of Total Oilseeds and Groundnut in Tamil Nadu

5.1 Road map for meeting seed requirement of groundnut

	<i>Kharif</i>	<i>Rabi-Summer</i>	Total
Area (in lakh ha) (avg of 2019-24)	2.32	0.93	3.24
Seed pod requirement @1.5 q/ha (in lakh q)	3.47	1.39	4.86
*Certified seed requirement (in lakh q)	1.04220	0.41721	0.01459
Breeder seed requirement (in lakh q)	0.01042	0.00417	0.01459
Breeder seed requirement (in q)	1042	417	1459

*Based on 30% SRR (Seed Replacement Rate) and 1:10 SMR (Seed Multiplication Ratio)

5.2 Varieties recommended for Tamil Nadu

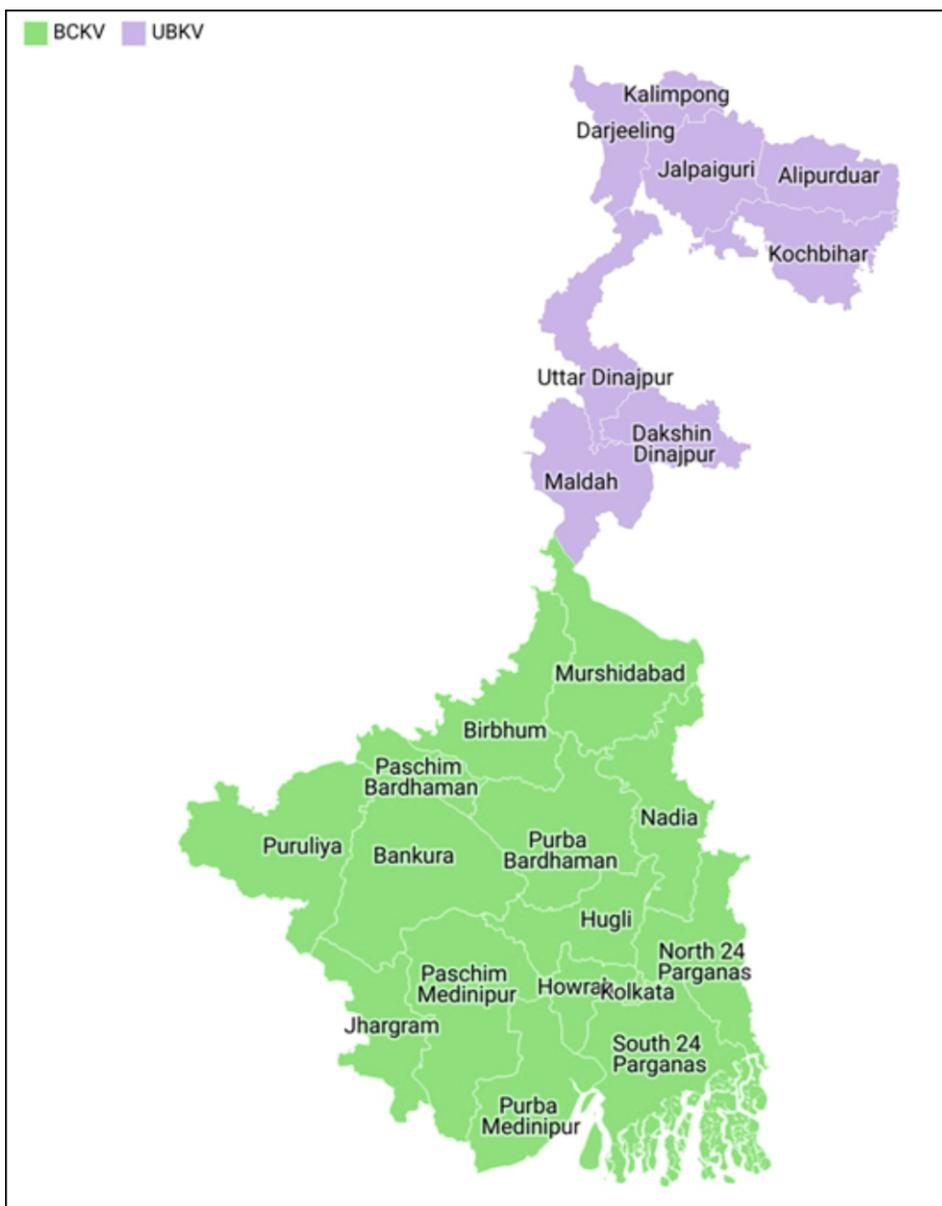
<i>Kharif</i>	CO-7, KDG 128, KDG 123, VRI 8 (VG 09220), GJG 32 (ICGV 03043), TMV 14, Phule Dhani (JL 1085), BSR 2 (BSG 0912), Dh 256, Girnar 4 (ICGV 15083), Girnar 5 (ICGV 15090), K 1812 (Kadiri Lepakshi), VRI 9 (VG 13163), GG 40 (Gujarat Groundnut 40) (ICGV 16668), Groundnut VRI 10 (VG 17008), Groundnut Co 8*
<i>Rabi/summer</i>	Co-7, ALG 06-320, VRI 8 (VG 09220), GJG 33 (ICGV 07222), Phule Chaitanya (Central- KDG 160), BSR 2 (BSG 0912), Central-Pragati (TCGS 894), K 1719 (Kadiri Chithravathi), VRI 9 (VG 13163), Groundnut VRI 10 (VG 17008), Groundnut Co 8*

* Gazette notification pending

5.3 Potential districts for enhanced groundnut seed production

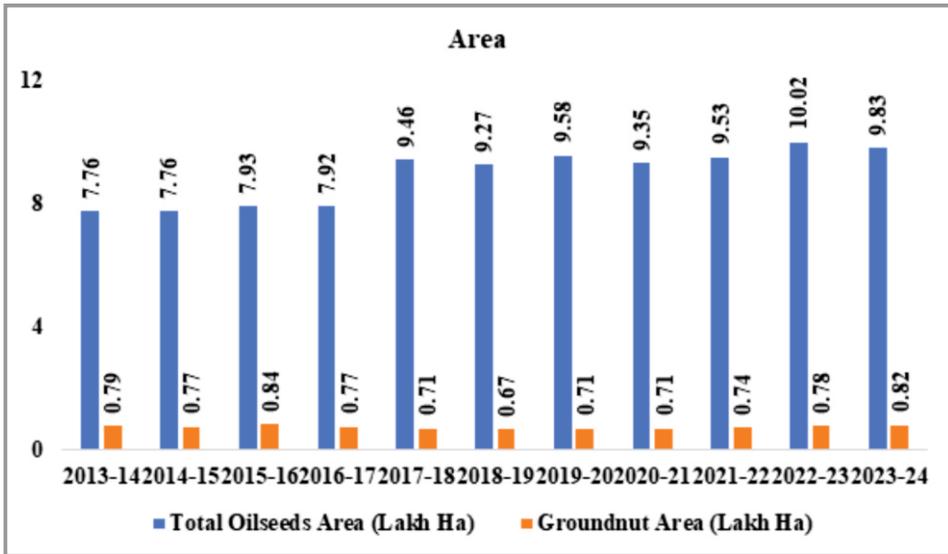
<i>Kharif</i>	<i>Rabi/Summer</i>
Thiruvannamalai, Villupuram, Cuddalore, Kallakurichi, Salem, Namakkal, Erode, Dharmapuri, Krishnagiri	Thiruvannamalai, Villupuram, Cuddalore, Kallakurichi, Salem, Namakkal, Erode, Dharmapuri, Krishnagiri, Pudukkottai, Ariyalur, Thanjavur, Mayiladuthurai, Kancheepuram and Perambalur

6. WEST BENGAL

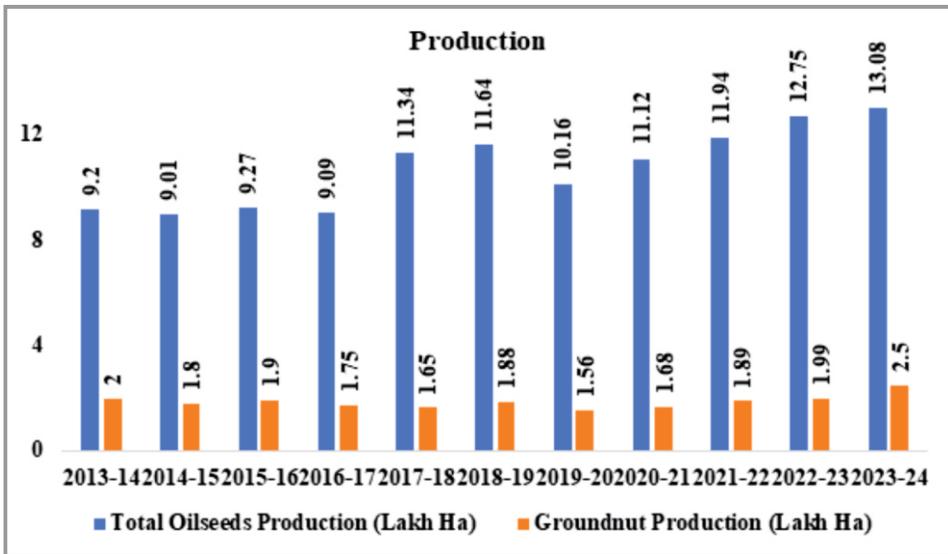


BCKV : Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, Nadia
UBKV : Uttar Banga Krishi Viswavidyalaya, Pundibari, Cooch Behar

Fig 11. Territorial Jurisdiction under State Agricultural Universities in West Bengal



Change in Area in 10 Years:
 Total Oilseeds – 26.7% Increase; Groundnut – 3.8% Increase



Change in Production in 10 Years:
 Total Oilseeds – 42.2% Increase; Groundnut – 25.0% Increase

Fig 12. Decadal Area and Production Trend of Total Oilseeds and Groundnut in West Bengal

6.1 Road map for meeting seed requirement of groundnut

	<i>Kharif</i>	<i>Rabi-Summer</i>	Total
Area (in lakh ha) (avg of 2019-24)	0.06	0.50	0.56
Seed pod requirement @1.5 q/ha (in lakh q)	0.09	0.75	0.83
*Certified seed requirement (in lakh q)	0.02610	0.22371	0.24981
Breeder seed requirement (in lakh q)	0.00026	0.00224	0.00250
Breeder seed requirement (in q)	26	224	250

*Based on 30% SRR (Seed Replacement Rate) and 1:10 SMR (Seed Multiplication Ratio)

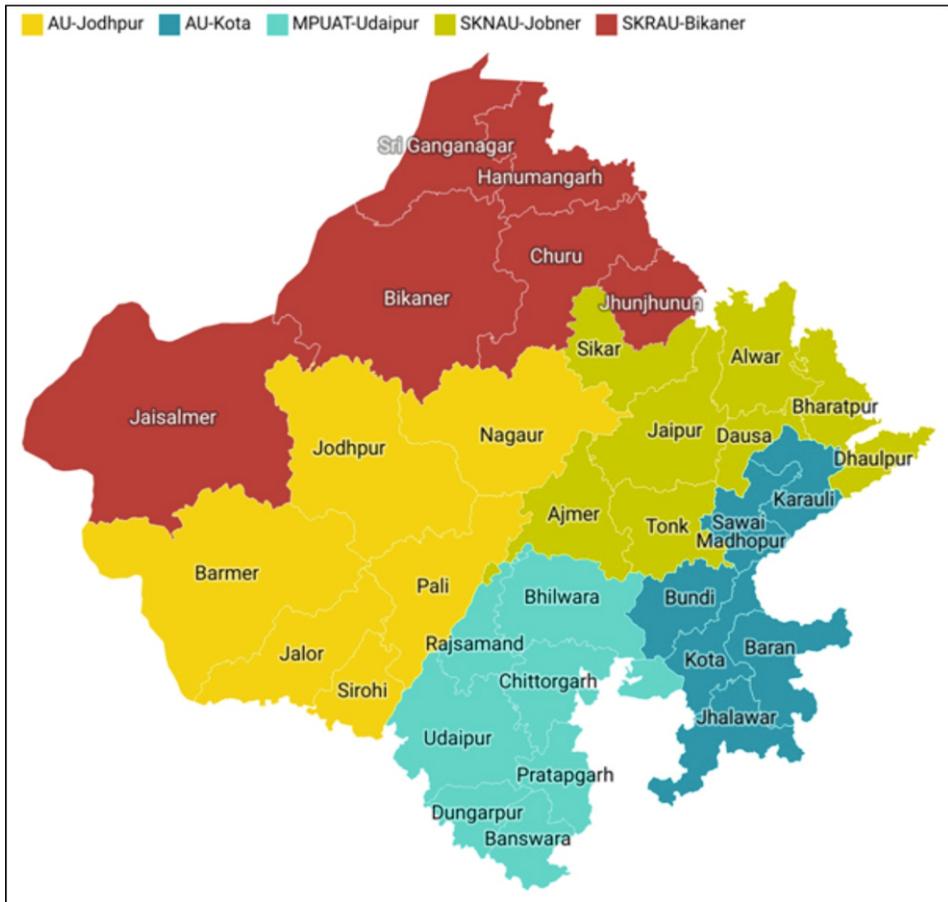
6.2 Varieties recommended for West Bengal

<i>Kharif</i>	KDG 123, GJG18, Raj Mungphali 2 (RG 578), GJG 19, ICAR-Konark*
<i>Rabi-/summer</i>	-

6.3 Potential districts for enhanced groundnut seed production

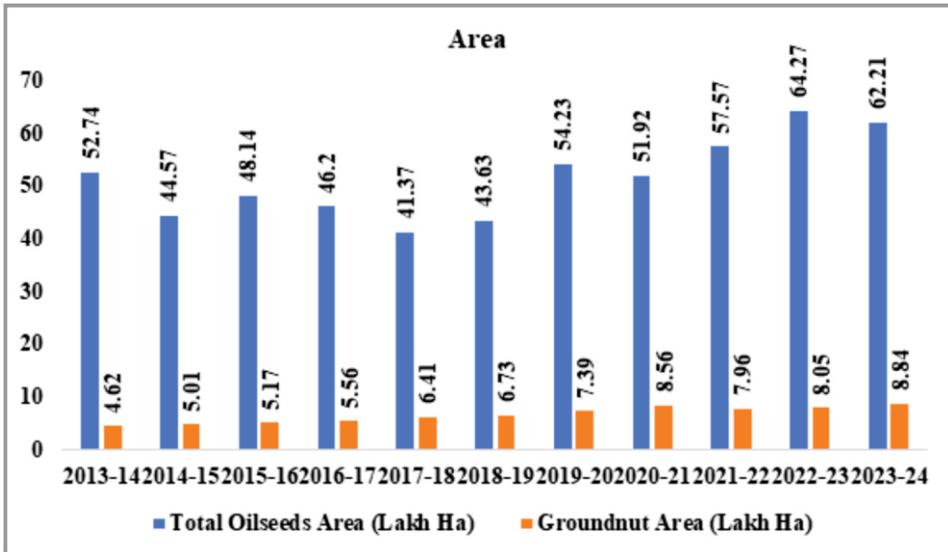
<i>Kharif</i>	<i>Rabi/Summer</i>
Bankura, Purulia, BirbhumPaschim Bardhaman, Nadia, Mursidabad, Alipurduar	Jalpaiguri, Coochbehar, Alipurduar, Nadia, Murshidabad, Hooghly, Purba Bardhaman, Paschim Medinipur

7. RAJASTHAN



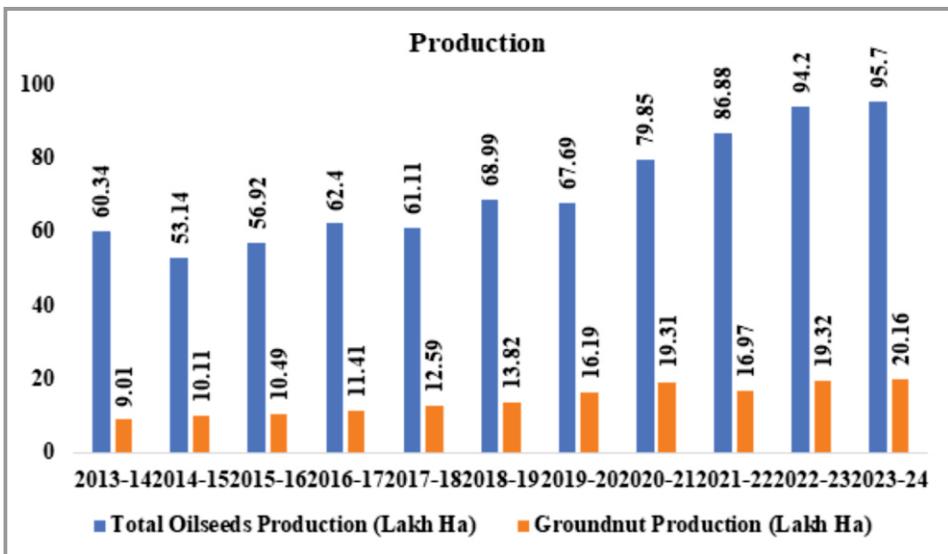
- AU** : Agriculture University (Jodhpur and Kota)
MPUAT : Maharana Pratap University of Agriculture and Technology, Udaipur
SKNAU : Sri Karan Narendra Agriculture University, Jobner
SKRAU : Swami Keshwanand Rajasthan Agricultural University, Bikaner

Fig 13. Territorial Jurisdiction under State Agricultural Universities in Rajasthan



Change in Area in 10 Years:

Total Oilseeds – 18% Increase; Groundnut – 91.3% Increase



Change in Production in 10 Years:

Total Oilseeds – 58.6% Increase; Groundnut – 123.8% Increase

Fig 14. Decadal Area and Production Trend of Total Oilseeds and Groundnut in Rajasthan

7.1 Road map for meeting seed requirement of groundnut

	<i>Kharif</i>	<i>Rabi-Summer</i>	Total
Area (in lakh ha) (avg of 2019-24)	8.13	0.03	8.17
Seed pod requirement @1.5 q/ha (in lakh q)	12.20	0.05	12.25
*Certified seed requirement (in lakh q)	3.66030	0.01463	3.67493
Breeder seed requirement (in lakh q)	0.03660	0.00015	0.03675
Breeder seed requirement (in q)	3660	15	3675

*Based on 30% SRR (Seed Replacement Rate) and 1:10 SMR (Seed Multiplication Ratio)

7.2 Varieties recommended for Rajasthan

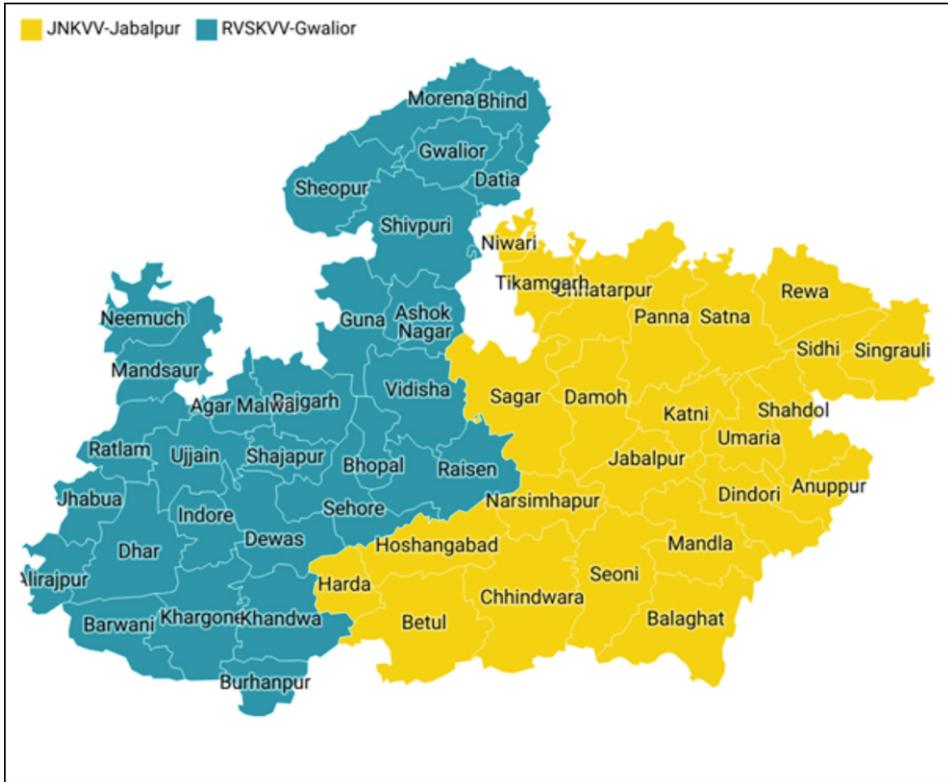
<i>Kharif</i>	Raj Mungfali 4 (RG 638)Raj Mungphali 3 (RG559-3), KDG 128, KDG 123, Girnar 4 (ICGV 15083), Girnar 5 (ICGV 15090), Pratap Mungphli 3 (UG 116), GG 40 (Gujarat Groundnut 40) (ICGV 16668), Raj Mungfali 4 (RG 638), ICAR-VRI 11, ICAR-VRI 12 (VG 19535), ICAR-Girnar 6*
<i>Rabi-/summer</i>	Pratap Mungphli 3 (UG 116)

* Gazette notification pending

7.3 Potential districts for enhanced groundnut seed production

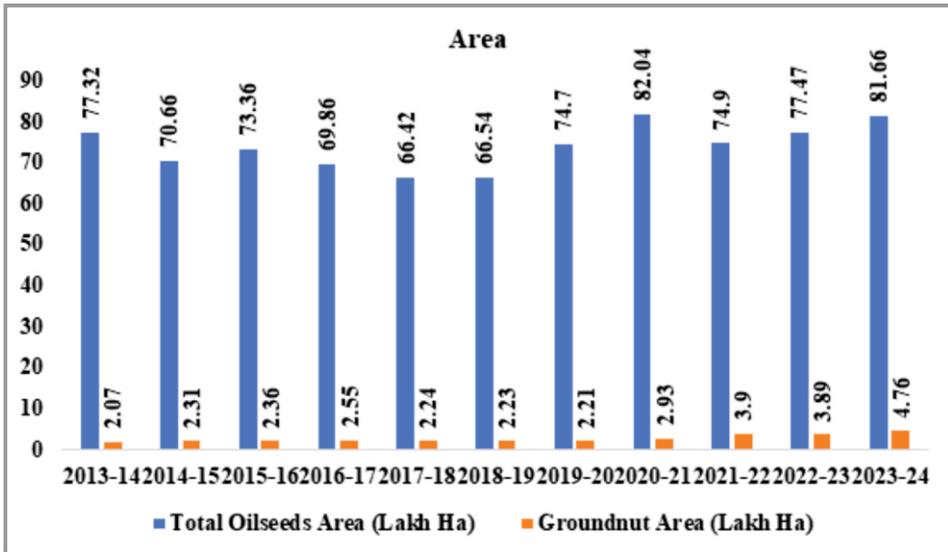
<i>Kharif</i>	<i>Rabi/Summer</i>
Jodhpur, Bikaner, Nagaur, and Jaisalmer, Barmer, Jalore, Pali, and Sikar	Pali, Sirohi, Jalore, and Barmer

8. MADHYA PRADESH



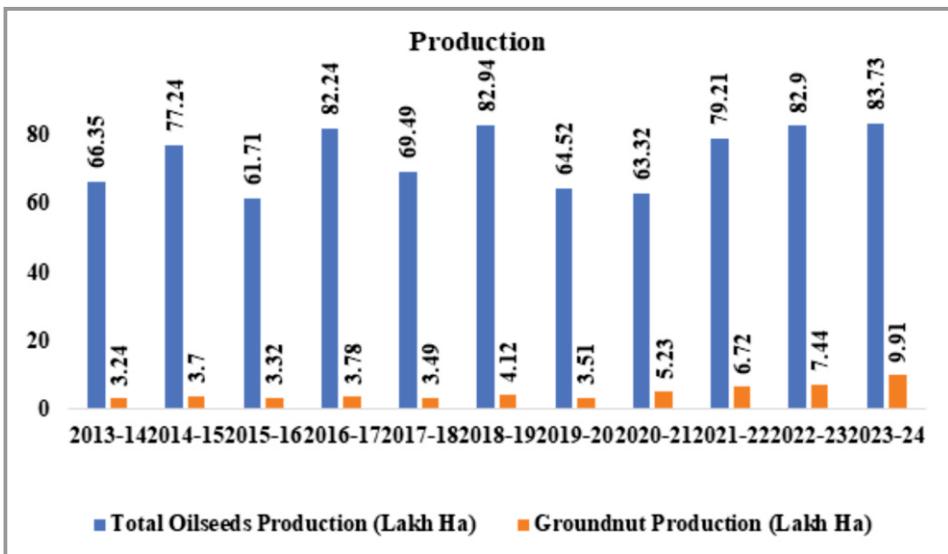
JNKVV : Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur
RVSKVV : Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, Gwalior

Fig 15. Territorial Jurisdiction under State Agricultural Universities in Madhya Pradesh



Change in Area in 10 Years:

Total Oilseeds – 5.6% Increase; Groundnut – 130% Increase



Change in Production in 10 Years:

Total Oilseeds – 26.2% Increase; Groundnut – 205.9% Increase

Fig 16. Decadal Area and Production Trend of Total Oilseeds and Groundnut in Madhya Pradesh

8.1 Road map for meeting seed requirement of groundnut

	<i>Kharif</i>	<i>Rabi-Summer</i>	Total
Area (in lakh ha) (avg of 2019-24)	3.49	0.04	3.54
Seed pod requirement @1.5 q/ha (in lakh q)	5.24	0.07	5.31
*Certified seed requirement (in lakh q)	1.57230	0.01980	1.59210
Breeder seed requirement (in lakh q)	0.01572	0.00020	0.01592
Breeder seed requirement (in q)	1572	20	1592

*Based on 30% SRR (Seed Replacement Rate) and 1:10 SMR (Seed Multiplication Ratio)

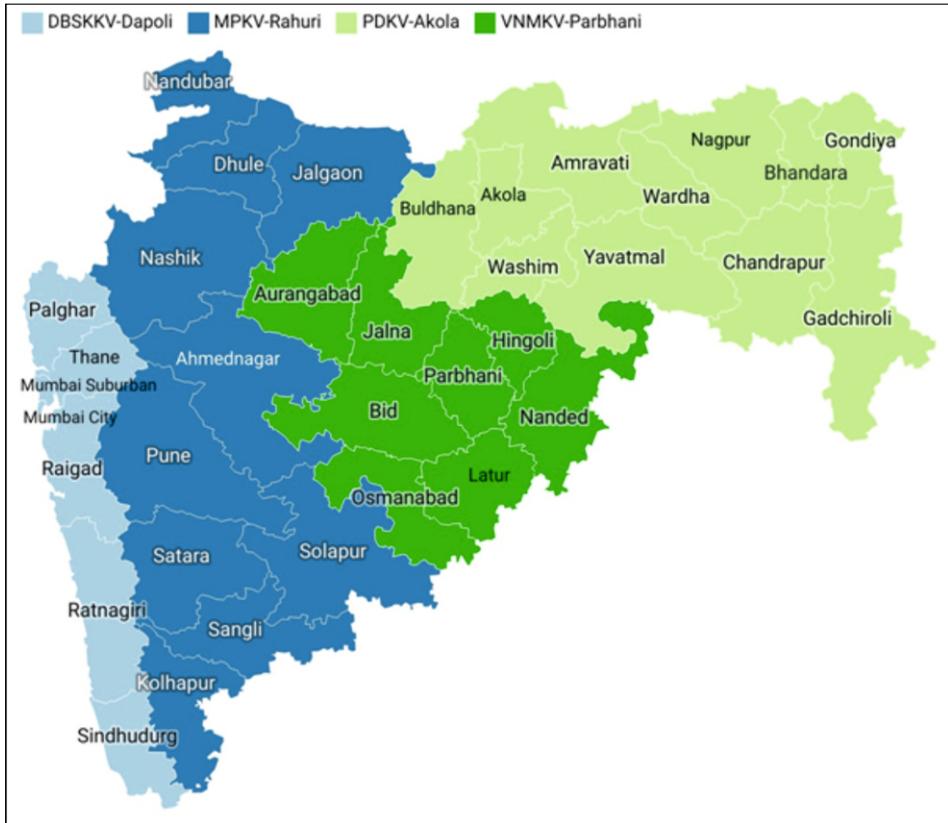
8.2 Varieties recommended for Madhya Pradesh

<i>Kharif</i>	Phule Bharathi (JL 776), Nitya Haritha (TCGS 1157)
<i>Rabi-/summer</i>	Phule Bharathi (JL 776), Nitya Haritha (TCGS 1157)

8.3 Potential districts for enhanced groundnut seed production

<i>Kharif</i>	<i>Rabi/Summer</i>
Gwalior, Shivpuri, Guna, Sagar, Morena, Bhind, Datia, and Sheopur	Jabalpur, Narsinghpur, Chhindwara, Betul, Vidisha, Raisen, Sehore, and Hoshangabad

9. MAHARASHTRA

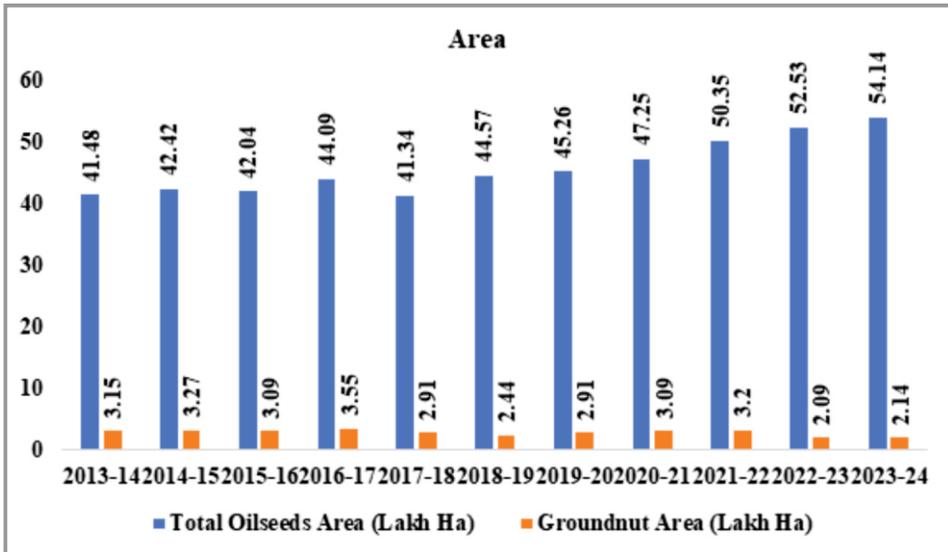


MPKV : Mahatma Phule Krishi Vidyapeeth, Rahuri

PDKV : Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola

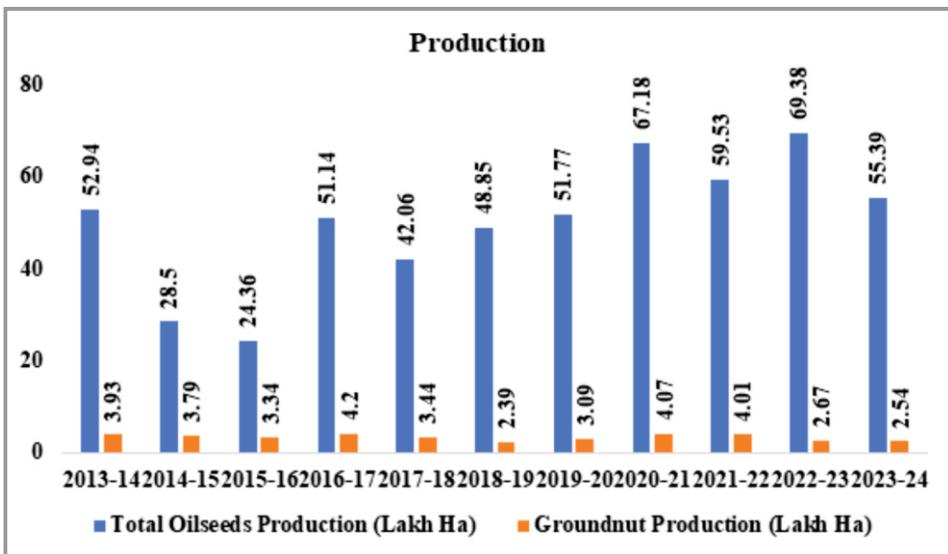
DBSKKV : Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli

Fig 17. Territorial Jurisdiction under State Agricultural Universities in Maharashtra



Change in Area in 10 Years:

Total Oilseeds – 30.5% Increase; Groundnut – 32.1% Decline



Change in Production in 10 Years:

Total Oilseeds – 4.6% Increase; Groundnut – 35.4% Decline

Fig 18. Decadal Area and Production Trend of Total Oilseeds and Groundnut in Maharashtra

9.1 Road map for meeting seed requirement of groundnut

	<i>Kharif</i>	<i>Rabi-Summer</i>	Total
Area (in lakh ha) (avg of 2019-24)	1.97	0.72	2.69
Seed pod requirement @1.5 q/ha (in lakh q)	2.95	1.08	4.03
*Certified seed requirement (in lakh q)	0.88560	0.32400	1.20960
Breeder seed requirement (in lakh q)	0.00886	0.00324	0.01210
Breeder seed requirement (in q)	886	324	1210

*Based on 30% SRR (Seed Replacement Rate) and 1:10 SMR (Seed Multiplication Ratio)

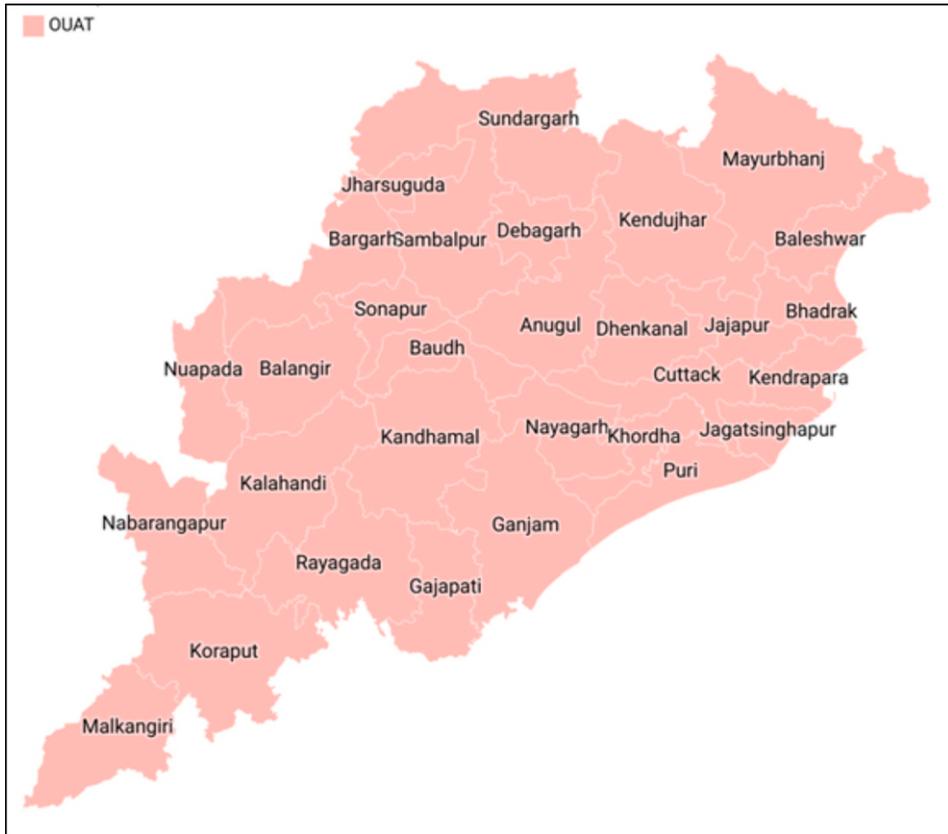
9.2 Varieties recommended for Maharashtra

<i>Kharif</i>	Phule Bharathi (JL 776), KDG 128, KDG 123, GJG 32 (ICGV 03043), Nitya Haritha (TCGS 1157), Konkan Bhuratna (RTNG 29), AK 335 (PDKVG-335), Phule Unnati (RHRG 6083)
<i>Rabi-/summer</i>	Phule Unnati (RHRG 6083), Dh 257, TAG-73 (TAG 14-73)

9.3 Potential districts for enhanced groundnut seed production

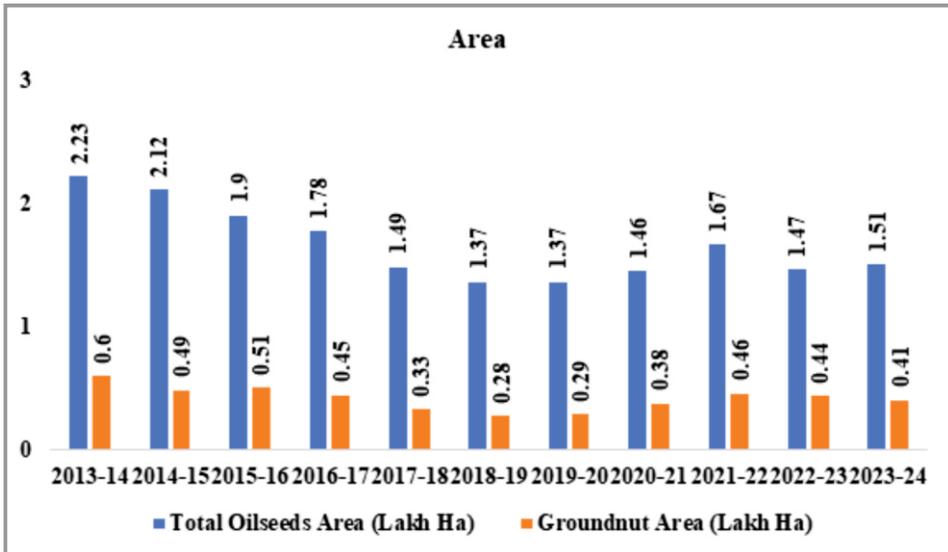
<i>Kharif</i>	<i>Rabi/Summer</i>
Satara, Sangli, Kolhapur, Ahmednagar, Pune, Dhule, Nandurbar, Jalgaon, Nagpur, Wardha, Akola, Amravati, Latur, Parbhani, Beed, Osmanabad, Thane, Palghar	Satara, Sangli, Kolhapur, Ahmednagar, Pune, Nandurbar, Yavatmal, Buldhana, Akola, Washim, Amravati, Gadchiroli, Parbhani, Nanded, A'ba Latur, Sindhudurg, Ratnagiri

10. ODISHA



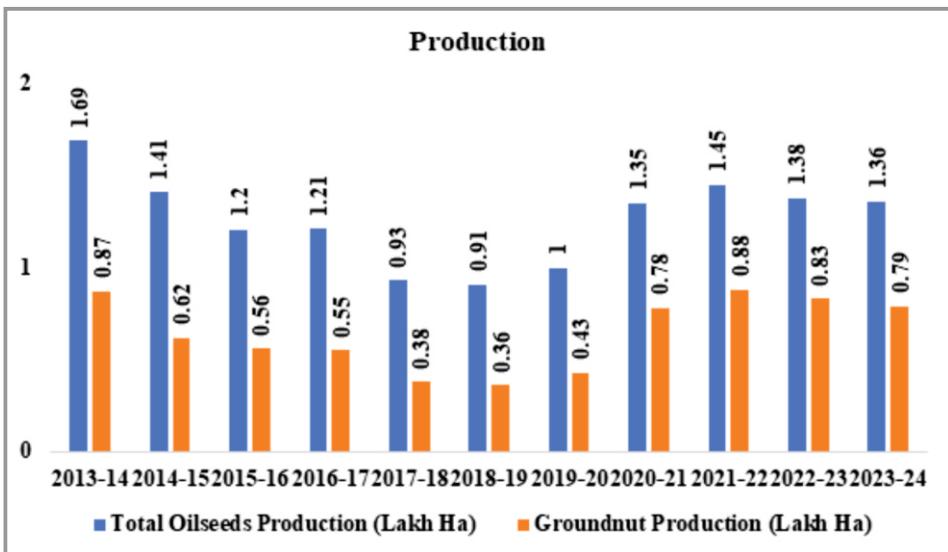
OUAT: Odisha University of Agriculture and Technology, Bhubaneswar

Fig 19. Territorial Jurisdiction under State Agricultural Universities in Odisha



Change in Area in 10 Years:

Total Oilseeds – 32.3% Decline; Groundnut – 31.7% Decline



Change in Production in 10 Years:

Total Oilseeds – 19.5% Decline; Groundnut – 9.2% Decline

Fig 20. Decadal Area and Production Trend of Total Oilseeds and Groundnut in Odisha

10.1 Road map for meeting seed requirement of groundnut

	<i>Kharif</i>	<i>Rabi-Summer</i>	Total
Area (in lakh ha) (avg of 2019-24)	0.16	0.24	0.40
Seed pod requirement @1.5 q/ha (in lakh q)	0.24	0.36	0.60
*Certified seed requirement (in lakh q)	0.07200	0.10710	0.17910
Breeder seed requirement (in lakh q)	0.00072	0.00107	0.00179
Breeder seed requirement (in q)	72	107	179

*Based on 30% SRR (Seed Replacement Rate) and 1:10 SMR (Seed Multiplication Ratio)

10.2 Varieties recommended for Odisha

<i>Kharif</i>	GJG18, Raj Mungphali 2 (RG 578), GJG 19, KDG 123, ICAR- Konark*
<i>Rabi-/summer</i>	Kalinga Groundnut 101

*Gazette notification pending

10.3 Potential districts for enhanced groundnut seed production

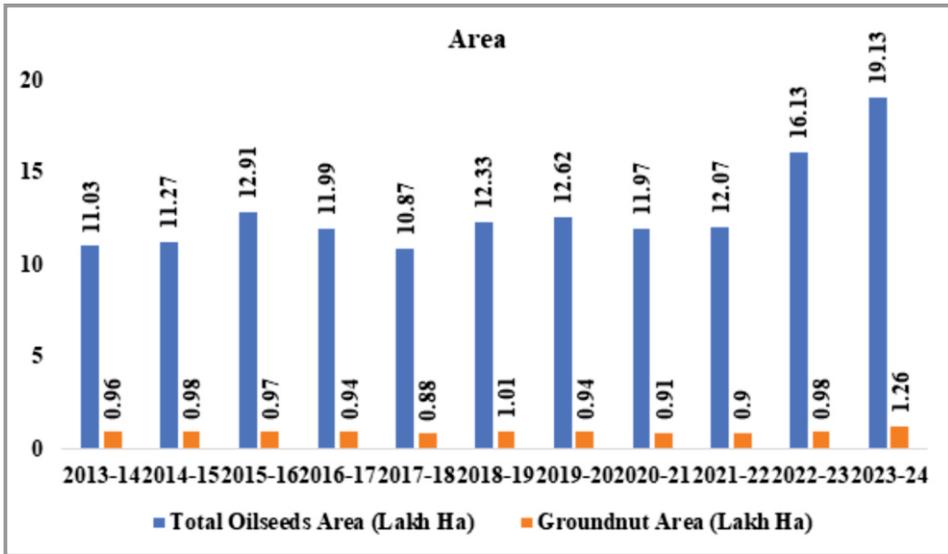
<i>Kharif</i>	<i>Rabi/Summer</i>
Ganjam, Kalahandi, Balangir, Sambalpur, Puri, Kendrapara, Bhadrak, and Mayurbhanj	Koraput, Rayagada, Nabarangpur, Boudh, Jajpur, Dhenkanal, Angul, and Khurda

11. UTTAR PRADESH



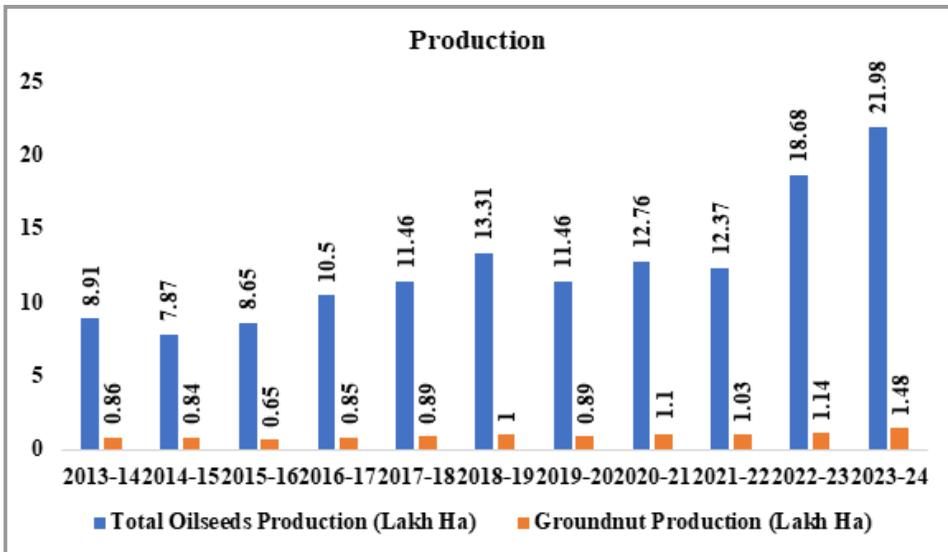
- CSAUA&T** : Chandra Shekhar Azad University of Agriculture and Technology, Kanpur
- SVPUAT** : Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut
- NDUAT** : Narendra Deva University of Agriculture and Technology Kumarganj, Ayodhya
- BUAT** : Banda University of Agriculture and Technology, Banda

Fig 21. Territorial Jurisdiction under State Agricultural Universities in Uttar Pradesh



Change in Area in 10 Years:

Total Oilseeds – 73.4% Increase; Groundnut – 31.3% Increase



Change in Production in 10 Years:

Total Oilseeds – 146.7% Increase; Groundnut – 72.1% Increase

Fig 22. Decadal Area and Production Trend of Total Oilseeds and Groundnut in Uttar Pradesh

11.1 Road map for meeting seed requirement of groundnut

	<i>Kharif</i>	<i>Rabi-Summer</i>	Total
Area (in lakh ha) (avg of 2019-24)	1.00		1.00
Seed pod requirement @1.5 q/ha (in lakh q)	1.50		1.50
*Certified seed requirement (in lakh q)	0.44910		0.44910
Breeder seed requirement (in lakh q)	0.00449		0.00449
Breeder seed requirement (in q)	449		449

*Based on 30% SRR (Seed Replacement Rate) and 1:10 SMR (Seed Multiplication Ratio)

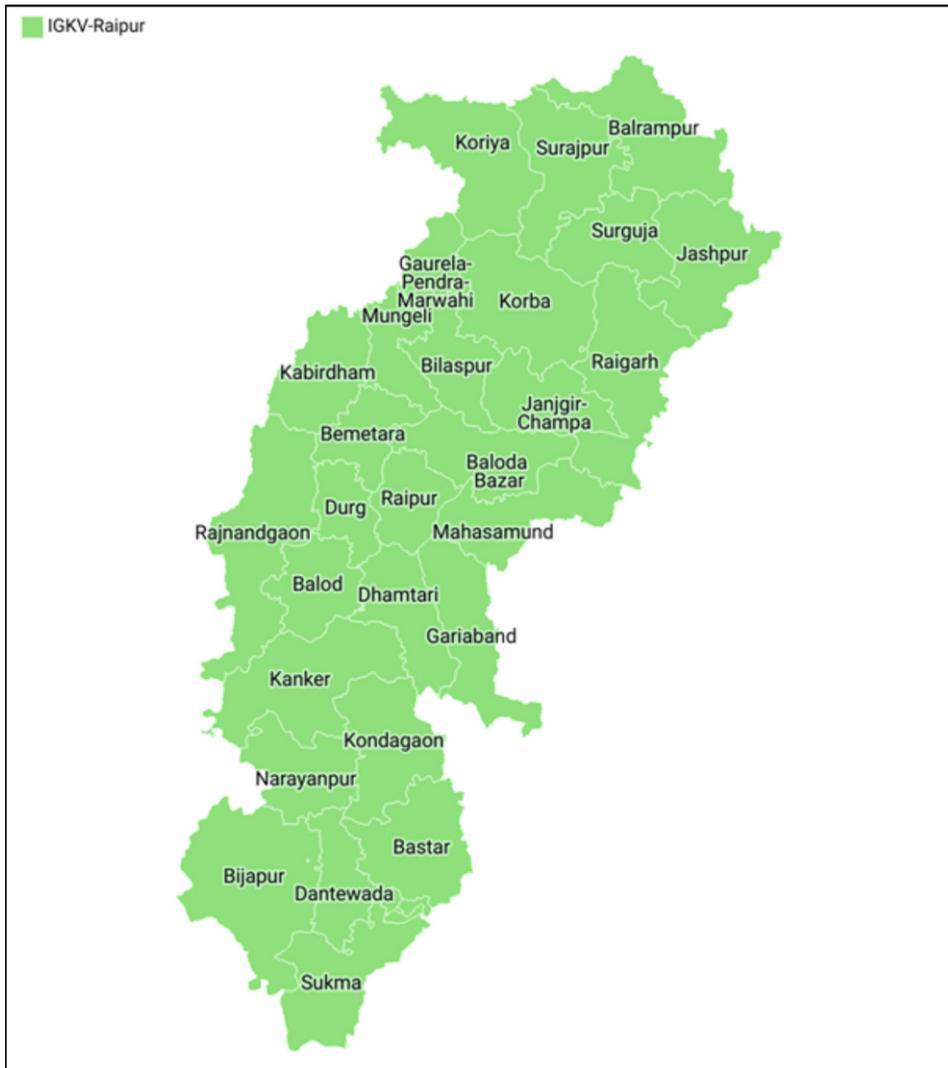
11.2 Varieties recommended for Uttar Pradesh

<i>Kharif</i>	Raj Mungfali 3 (RG 559-3), Raj Mungfali 4 (RG 638), ICAR-VRI 12 (VG 19535)
<i>Rabi-/summer</i>	Avtar (ICGV 93468), J 87 (Gujarat Groundnut 36)

11.3 Potential districts for enhanced groundnut seed production

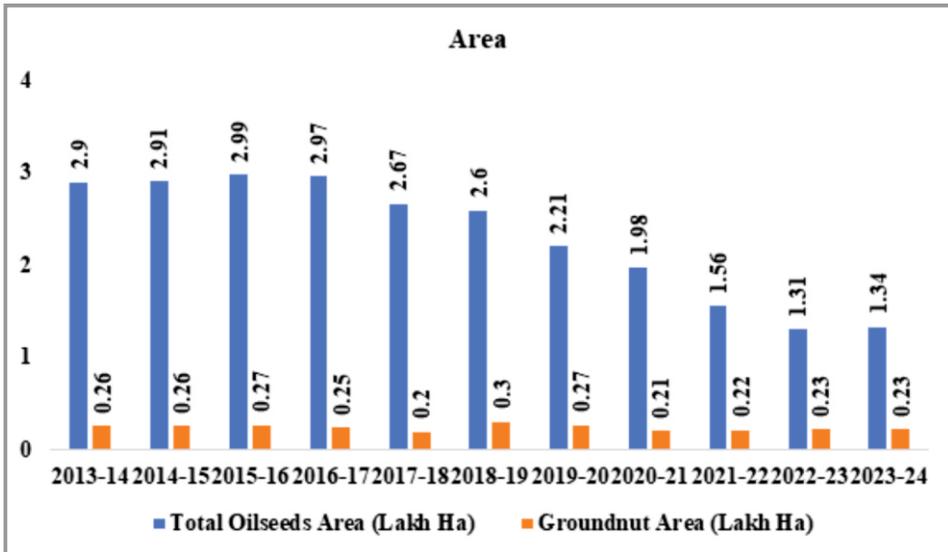
<i>Kharif</i>	<i>Rabi/Summer</i>
Jhansi, Lalitpur, Banda, Mahoba, Hamirpur, Chitrakoot, Sonbhadra, and Mirzapur	Fatehpur, Kanpur Dehat, Auraiya, Etawah, Unnao, Hardoi, Sitapur, and Barabanki

12. CHHATTISGARH



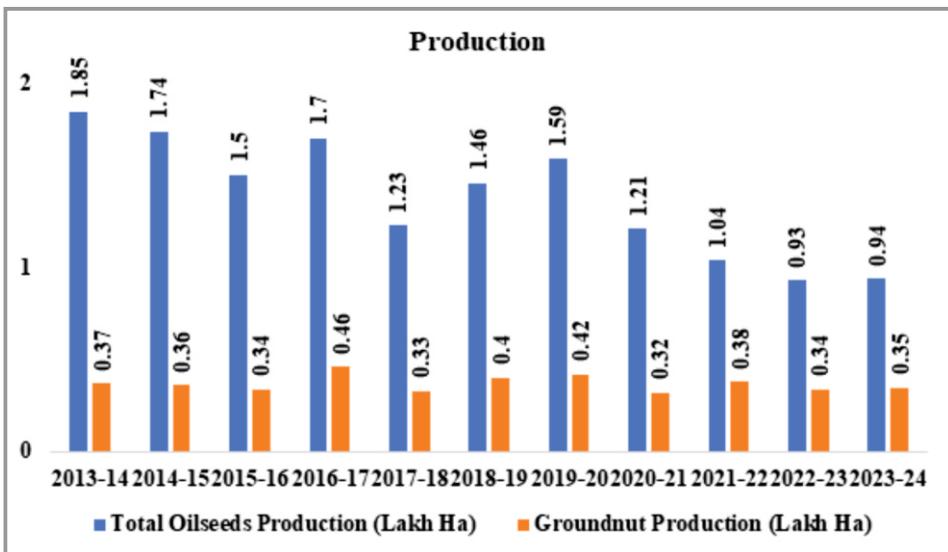
IGKV: Indira Gandhi Krishi Vishwavidyalaya, Raipur

Fig 23. Territorial Jurisdiction under State Agricultural Universities in Chhattisgarh



Change in Area in 10 Years:

Total Oilseeds – 53.8% Increase; Groundnut – 11.5% Decline



Change in Production in 10 Years:

Total Oilseeds – 49.2% Increase; Groundnut – 5.4% Decline

Fig 24. Decadal Area and Production Trend of Total Oilseeds and Groundnut in Chhattisgarh

12.1 Road map for meeting seed requirement of groundnut

	<i>Kharif</i>	<i>Rabi-Summer</i>	Total
Area (in lakh ha) (avg of 2019-24)	0.23		0.23
Seed pod requirement @1.5 q/ha (in lakh q)	0.35		0.35
*Certified seed requirement (in lakh q)	0.10440		0.10440
Breeder seed requirement (in lakh q)	0.00104		0.00104
Breeder seed requirement (in q)	104		104

*Based on 30% SRR (Seed Replacement Rate) and 1:10 SMR (Seed Multiplication Ratio)

12.2 Varieties recommended for Chattisgarh

<i>Kharif</i>	CG Mungfali-1 (CGM-1), Chhattisgarh Trombay Mungfli (CGTM)*
<i>Rabi-/summer</i>	Chhattisgarh Trombay Mungfli (CGTM)*

*Gazette notification pending

12.3 Potential districts for enhanced groundnut seed production

<i>Kharif</i>	<i>Rabi/Summer</i>
Bilaspur, Rajnandgaon, Durg, Korba, Kanker, Kabirdham, Bastar, and Surguja	Raipur, Mahasamund, Dhamtari, Bemetara, Balod, Durg, Kanker, and Bastar

13. Strategies for enhancing seed production

1. **Expansion of Seed Production Networks:** Expand the network of breeder seed production by engaging multiple stakeholders, including public sector institutions and private companies. This will decentralize production, reduce bottlenecks, and increase breeder seed availability in different groundnut-producing regions. Participatory seed production, especially through community-based approaches, can further enhance local-level seed availability.
2. **Enhancing Seed Replacement Rate (SRR) and Variety Replacement Rate (VRR):** Focus on increasing the Seed Replacement Rate for groundnut by replacing outdated varieties with newly developed, high-yielding, climate resilient varieties. Strategic efforts should include the induction of newly released varieties into the seed chain, and phasing out obsolete varieties to improve productivity and resilience.
3. **Farmer Participation in Seed Systems:** Promote participatory Breeder seed production programs in progressive farmers' field taking land on lease basis under the direct supervision of the Breeder where farmers are involved in producing and maintaining high-quality seeds on their farms. This ensures the availability of localized, disease-free seeds, and provides farmers with additional income streams.
4. **Better Varietal Planning and Monitoring:** Implement a rolling seed production plan with a five-year horizon, reviewed annually to assess breeder seed requirements region-wise. This plan should focus on achieving the ideal SRR for each crop and variety, along with ensuring the availability of high-yielding varieties suited to regional agro-ecological zones. A robust feedback mechanism should be established to ensure real-time monitoring and course corrections.
5. **Breeder Seed Banks:** Create regional breeder seed banks to ensure seed security in the event of crop failures, pest outbreaks, or unforeseen climatic challenges. These seed banks would store viable breeder seeds of diverse groundnut varieties, which can be deployed rapidly to meet emergency demands or replace lost crops.
6. **Optimizing Breeder Seed Production through New Niches:** Identify and utilize non-traditional regions and off-season niches for groundnut breeder seed production. Rice-fallow areas in southern India, for instance, can be utilized for *Rabi* groundnut seed production, ensuring a consistent supply of breeder seeds even during unfavorable growing seasons.
7. **Strengthening Collaboration through MoUs:** States should establish Memorandums of Understanding (MoUs) with ICAR institutes, State

Agricultural Universities (SAUs), and other research centers responsible for developing the recommended varieties for the state. These agreements should ensure the regular and timely supply of Breeder seeds, technical support, and training to state-level seed production agencies.

8. **Establishing Advanced Seed Storage Infrastructure:** Invest in storage facilities, including climate-controlled environments and cold storage infrastructure, to preserve the quality and viability of breeder seeds locally, especially in regions with high temperature and humidity fluctuations. These facilities should incorporate moisture regulation and pest management systems.
9. **Seed Quality Assurance and Testing:** Strengthen seed testing laboratories and accredit more laboratories to the International Seed Testing Association (ISTA) standards. This will improve seed quality assurance for breeder seeds, and enhance the global competitiveness of India's seed sector.
10. **Digital Seed Management Platforms:** Establish a centralized digital platform for real-time tracking of breeder seed production, distribution, and stock availability. This can include seed demand forecasting, seed distribution logistics, and quality assurance monitoring. Such systems will streamline breeder seed supply chains, improving efficiency and transparency.
11. **Capacity Building and Resource Allocation:** Regular training programs should be conducted for farmers, seed producers, and public-private partnerships to leverage innovative seed production technologies. Additionally, timely support from the government in the form of financial incentives, policy reforms, and increased Minimum Support Prices (MSP) will boost groundnut seed production efforts. Each state should target and support breeder seed production by adopting production subsidy and distribution subsidy to public and private institutes and seed producing farmers under RKVY project of NFSM, MA&FW.
12. **Incentivizing Breeder Seed Producers:** Provide financial incentives and recognition to breeders and seed production centers that achieve high seed production targets, focusing on maintaining quality. Rewarding innovation and efficiency in breeder seed production will encourage continuous improvement in the sector.



भारत
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