

## Cluster Frontline Demonstrations on Oilseeds (2021-22)

Cluster frontline demonstration on oilseeds is a unique approach under NFSM to make India self-sufficient in oil production. The project has been started since 2015-16. In 2021, Clustered frontline Demonstration on Oilseeds was conducted on groundnut, rapeseed and mustard, sesame, soybean, sunflower and Niger by the KVKs of Odisha & West Bengal under the supervision of ICAR-ATARI Kolkata. The total area covered by CFLD oilseeds during 2021-22 is 870 ha and the total no. of demonstrations was 2237.

### State- and crop-wise performance of CFLD Oilseeds during *kharif*2021 (CFLD regular programme)

State	Crop	Target of FLD Approved		Achievements of CFLD		Yield (q/ha)		Increase %	Difference in yield (q/ha)
		No. of Demo	Area (ha)	No. of Demo	Area (ha)	Demo	Local		
West Bengal	Groundnut	125	50	135	50	22.86	15.83	44.37	7.02
	Sesame	50	20	80	20	9.425	6.51	44.77	2.9
	Soybean	25	10	30	10	13.28	11.9	11.59	1.38
Odisha	Groundnut	225	90	226	90	20.54	15.55	32.09	4.99
	Sesame	150	60	166	60	5.94	4.44	33.78	1.5
	Niger	50	20	50	20	4.74	3.5	35.42	1.24
<b>Total</b>		<b>625</b>	<b>250</b>	<b>687</b>	<b>250</b>				

In *kharif* season total 80 ha was covered by CFLD Oilseeds in West Bengal and 170 ha in Odisha. Groundnut covered 50 ha in West Bengal and 90 ha in Odisha whereas sesame covered 20 ha in West Bengal and 60 ha in Odisha. Soybean and niger are demonstrated in 10 ha and 20 ha area respectively in West Bengal and Odisha during *kharif* season. A total 687 no. of demonstrations (250 ha) was conducted during Kharif season. The maximum yield increase percentage is observed in case of sesame (44.77%) followed by groundnut 44.37% and soybean 11.59%. In Odisha the maximum yield increase is observed in Niger i.e 35.42%, followed by sesame 33.78% and groundnut 32.09%.

## Most successful technology application under CFLD on groundnut during *kharif* 2021

### Demonstrated Technology

Introduction of improved variety *Dharani* (TCGS-1043) along with micronutrient application at 30 and 45 DAS and one spray of lambda cyhalothrin @ 1 ml/litre

Name of KVK	Cooch Behar KVK
<b>Crop and variety</b>	Groundnut var. Dharani (TCGS-1043)
<b>Name of farmer &amp; address</b>	Protipad Deb, Village- RuierKuthi, Vetaguri, Dinhata-I Block, Cooch Behar, West Bengal
<b>Details of technology demonstrated</b>	Improved variety <i>Dharani</i> (TCGS-1043) + Micronutrient application at 30 and 45 DAS + one spray of lambda cyhalothrin @ 1 ml/litre
<b>Success point</b>	Timely planting of Groundnut, careful and timely intercultural operation was carried out.
<b>Farmers' feedback</b>	Bold seeded Groundnut. Mr. Deb is satisfied with the varietal performance and yield obtained.
<b>Yield (q/ha)</b> Potential yield of variety District average (Previous year) State average (Previous year)	Demo yield: 27.25 q/ha Potential yield: 30 q/ha District average: 16.2q/ha State average yield: 19.54 q/ha

### Performance of technology vis-à-vis Local check (Increase in productivity and returns)

Used practice	Yield (q/ha)	Gross cost (Rs/ha)	Gross income (Rs/ha)	Net income (Rs/ha)	B:C ratio
Farmer practices	14.4	18400.00	24726.00	6326.00	1.34
Demonstration	27.25	24000.00	43128.00	19128.00	1.79
% Increase in yield	47.15%				



**State-and crop-wise performance of CFLD Oilseeds during Rabi 2022 (CFLD regular programme)**

State	Crop	Target of CFLD Approved		Achievements of FLD		Yield (q/ha)		Increase %	Difference in yield (q/ha)
		No. of Demo	Area (ha)	No. of Demo	Area (ha)	Demo	Local		
West Bengal	Groundnut	125	50	125	50	18.72	13.97	34	4.75
	Rapeseed & Mustard	625	250	625	250	14.6	8.63	69.1	5.97
	Sunflower	25	10	25	10	13.59	10.67	27.36	2.92
Odisha	Groundnut	400	160	400	160	18.74	14.19	32.06	4.55
	Rapeseed & Mustard	375	150	375	150	8.87	5.51	60.98	3.36
<b>Total</b>		<b>1550</b>	<b>620</b>	<b>1550</b>	<b>620</b>				

In *rabi* season rapeseed and mustard covered maximum area (250 ha) in West Bengal followed by groundnut 50 ha and sunflower 10 ha. In Odisha groundnut covered the maximum area (160 ha) followed by rapeseed and mustard in 150 ha during *rabi* season. A total 1550 no. of demonstrations (620 ha) was conducted in Rabi season. The yield increase percentage of groundnut in Odisha is around 32% over farmers' practice and in West Bengal the yield increase percentage is 34%. During *rabi* season in West Bengal maximum yield increase i.e. 69.1% is observed in rapeseed & mustard followed by groundnut (34%) and sunflower (27.36%).

**State- and crop-wise performance of CFLD Oilseeds during 2022 (CFLD regular programme)**

State	Crop	Area (ha)		Yield (q/ha)		% Increase	Net returns (Rs.)		BC Ratio
		Target	Achieve.	Demo	FP		Demo	FP	
Odisha	Groundnut	250	250	19.64	14.87	32.07	64690.1	40117.55	1.61
	Sesame	60	60	5.94	4.44	33.78	19101.6	11545.66	0.60
	Rapeseed & Mustard	150	150	8.87	5.51	60.98	36538	18070	2.02
	Niger	20	20	4.74	3.5	35.42	14623.5	8240	1.77

West Bengal	Groundnut	100	100	20.79	14.9	39.53	59231.5	36723.75	1.61
	Sesame	20	20	9.425	6.51	33.78	31600	30336.6	1.04
	Soybean	10	10	13.28	11.9	11.59	35562	22350	1.59
	Rapeseed & Mustard	250	250	14.6	8.63	69.1	23900	16142.5	1.48
	Sunflower	10	10	13.59	10.67	27.36	35110	23641	1.48

The benefit cost ratio of rapeseed and mustard was 2.02 in Odisha and 1.48 in West Bengal. In the case of groundnut, sesame, niger, sunflower and soybean were 1.61, 1.04, 1.24, 1.48 and 1.38, respectively. The high yielding varieties demonstrated under CFLD Oilseeds are *TG 51*, *Devi*, *Dharani* of groundnut, *PM 30*, *NCHB-101*, *Kesari Gold* of mustard, *GT10*, *Suprava* and *Savitri* of sesame, *Utkal niger 150* of niger, *PS1368* of Soybean and *LG30801* of sunflower.