

Promotion of oil palm during next two year in India

1. Introduction & Scope for Oil Palm cultivation

Oil palm crop is one of the highest oil (palm oil) yielding crops among the all perennial crops. Oil palm tree produces edible palm-oil as well as palm kernel-oil. This oil palm is considered as golden palm due to its high yielding capacity. Oil palm produces 4 to 5 tonnes per ha of Crude Palm Oil (CPO) and 0.40 to 0.50 tonne per ha of Palm Kernel Oil (PKO) from 4th to 30th year of its productive life span. Oil palm crop provides the excellent substitute of importing the oil. In India, oil palm is being cultivated in 13 states by covering about 3,00,000 hectares by 2016-17 under irrigated conditions.

In India, an area of 19.33 lakh ha has been identified by the Department of Agriculture, Cooperation and Farmers Welfare for oil palm cultivation in 19 states of the country including 2.18 lakh ha area in North Eastern States during the year 2012. Out of 19.33 lakh ha area more potential States are Andhra Pradesh (4.69 lakh ha), Gujarat & Karnataka with 2.60 lakh ha and Tamil Nadu & Bihar with 2.00 lakh ha area. A statement indicating potential area, area covered and production of FFBs & CPOs in India is given at **Annexure-I** (page no. 4).

2. Efforts of Government of India

In view of the importance and significance of oil palm cultivation, DAC&FW had taken up Technology Mission on Oilseeds & Pulses (TMOP) in 1991-92 in the potential states. A comprehensive Centrally Sponsored Scheme Oil Palm Development Programme (OPDP) was taken up during Eighth & Ninth Plan. During the Tenth and Eleventh Plan, Government of India had provided support for oil palm cultivation under Centrally Sponsored Integrated Scheme of Oilseeds, Pulses, Oil Palm and Maize (ISOPOM). To boost oil palm cultivation, Government of India had implemented a Special Programme on Oil Palm Area Expansion (OPAE) under RKVY from the year 2011-12 to 2014-15.

During the 12th Five Year Plan, a new National Mission on Oilseeds and Oil Palm (NMOOP) has been launched under which Mini Mission-II (MM-II) is dedicated to oil palm area expansion and productivity increases. MM-II of NMOOP is being implemented in 12 States viz; Andhra Pradesh, Telangana, Chhattisgarh, Tamil Nadu, Kerala, Gujarat, Karnataka, Odisha, Mizoram, Nagaland, Assam and Arunachal Pradesh w.e.f. 01.04.2014.

3. Strategies of oil palm

1. Special focus for promotion of oil palm in all NE states.
2. To meet the planting materials requirement for new plantation both from indigenous and imported sources.
3. Support to farmers for planting materials, inter cropping & maintenance cost for gestation period (4 yrs), bore well, drip irrigation, harvesting tools.
4. Capacity building of farmers and extension officials.
5. Assured procurement of FFBs through processors.
6. Supporting oil palm growers through Market Intervention Scheme (MIS) to provide remunerative prices of FFBs as and when international CPO price fall below \$ 800 per MT.

4. Objectives

Bring additional 75,000 hectare area under oil palm cultivation through area expansion approach in the country during next two years. The state-wise area expansion on target is given at **Annexure-II**. (page no. 5).

5. Duration of the scheme

Two years (2017-18 & 2018-19)

6. Implementing agency

Oilseeds Division, Department of Agriculture, Co-operation and Farmers Welfare will implement the scheme at national level under Mini Mission II of NMOOP. Joint Secretary (Oilseeds) will act as Mission Director of NMOOP. The principal Secretary (Agriculture/Horticulture) of the respective state will be in charge of the scheme at state level.

7. Monitoring of the scheme

A committee under the Chairmanship of Agriculture Commissioner will be constituted to monitor the progress of the scheme time to time atleast 2 times in a year. The monitoring committee will be as follows:

1	Agriculture Commissioner	Chairman
2	Joint Secretary (Oilseeds)	Member
3	DDG (Horti.), ICAR	Member
4	Horticulture Commissioner, DAC&FW	Member
5	Director, IOPR, Pedavegi	Member
6	ADC (Oilseeds), DAC&FW	Member Secretary

8. Area of operation and funding pattern

Twelve states of Andhra Pradesh, Telangana, Karnataka, Assam, Kerala, Gujarat, Tamil Nadu, Chhattisgarh, Orissa, Mizoram, Nagaland and Arunachal Pradesh will be covered under this scheme **Annexure-III** (page no. 6). The funds would be released to the states as per norms of NMOOP. The expenditure will be shared between Central and State Government in the ratio of 90:10 for Assam, Arunachal Pradesh, Nagaland and Mizoram and 60:40 for remaining States. However, 100% support is being provided to Indian Institute of Oil Palm Research (IOPR), Pedavegi, Andhra Pradesh for supply of planting materials, need based R&D and extension activities.

9. Interventions and Assistance

Under the MM-II of NMOOP, financial assistance are being provided to the farmers @ 85% cost of the planting material (Rs. 12000/- per ha) and @ 50% cost of the other components like maintenance cost of new plantations for four years (Rs. 20000/- per ha), inputs for inter-cropping in oil palm during gestation period (Rs. 20000/- per ha), installation of drip-irrigation systems, diesel/electric pump-sets, bore-well (Rs. 50000/- per unit), water harvesting structures/ponds, construction of vermi-compost units and purchasing of machinery & tools etc. The component-wise pattern of assistance of MM-II of NMOOP is being given at **Annexure-IV** (page no. 7-8).

10. Action Plans

The Annual Action Plans of Mini Mission II oil palm indicating the set target will be sent to DAC&FW by the state Government for final approval of Government of India.

11. Reporting System

State will compile & furnish the physical and financial status on implementation of the scheme on Monthly and Quarterly progress report to this Department as per formats given in **Annexure V** (page no. 9).

12. Field Monitoring

The oil palm plantation in various states will be monitored by National Level Consultants, senior officers of DAC&FW time to time.

13. Physical and Financial targets

A. State-wise physical target and fund allocation.

(GOI share Rs. in Crore)

S. No.	State	Physical target (ha)			Fund Allocation		
		2017-18	2018-19	Total	2017-18	2018-19	Total
General states							
1	Andhra Pradesh	11500	12000	23500	2491.00	3230.00	5721.00
2	Telangana	2000	2500	4500	438.00	654.00	1092.00
3	Karnataka	1500	2000	3500	333.00	515.00	848.00
4	Tamil Nadu	1500	2000	3500	331.00	514.00	845.00
5	Odisha	2050	3000	5050	452.00	758.00	1210.00
6	Gujarat	550	600	1150	121.00	160.00	281.00
7	Chhattisgarh	1500	2800	4300	334.00	684.00	1018.00
8	Kerala	50	100	150	12.00	25.00	37.00
	Total	20650	25000	45650	4512.00	6540.00	11052.00
NE states							
9	Mizoram	5350	6000	11350	1368.00	2020.00	3388.00
10	Nagaland	3000	3000	6000	758.00	1034.00	1792.00
11	Assam	3000	3000	6000	758.00	1034.00	1792.00
12	Arunachal Pradesh	3000	3000	6000	756.00	1037.00	1793.00
	Total	14350	15000	29350	3640.00	5125.00	8765.00
13	IIOPR	-	-	-	80.00	103.00	183.00
	Grand Total	35000	40000	75000	8232.00	11768.00	20000.00

The component-wise fund allocation are given below:

S. No.	Components	2017-18	2018-19	Total
1	Area Expansion for oil palm	3037.00	3420.00	6457.00
2	Maintenance cost	1265.00	2690.00	3955.00
3	Productions inputs	3803.00	5507.00	9310.00
4	Transfer of Technology	127.00	151.00	278.00
	Total	8232.00	11768.00	20000.00

The details are seen at **Annexure-VI** (page no. 10). The funds will be adjusted within the BE/RE of NMOOP. No additional fund is required for this project.

13. Output of the project

An additional area of 75,000 ha will be covered under oil palm cultivation during the year 2017-18 & 2018-19 and will start bearing the fruits after 3 years of plantation. The total area in the country will be 3.75 lakh ha from which 3.00 lakh tonnes of CPOs is estimated by the end of 2018-19.

ANNEXURE-I

POTENTIAL AREA, COVEREGE SO FAR AND CPO PRODUCTION OF OIL PALM IN INDIA

S. No.	State	Oil Palm area (ha)		Production (in MT)	
		Potential area	Coverage so far	FFBs	CPO
1.	Andaman & Nicobar Islands	3000	1593	0	0
2.	Andhra Pradesh	419500	150530	1144092	193562
3.	Arunachal Pradesh	25000	330	0	0
4.	Assam	25000	570	0	0
5.	Bihar	200000	0	0	0
6.	Chhattisgarh	48000	2162	0	0
7.	Goa	2000	953	3217	581
8.	Gujarat	260250	5054	523	0
9.	Karnataka	260000	41431	14740	2538
10.	Kerala	6500	5769	40611	7016
11.	Maharashtra	180000	1474	0	0
12.	Meghalaya	50000	0	0	0
13.	Mizoram	61000	25741	3753	432
14.	Nagaland	50000	140	0	0
15.	Odisha	56000	18484	4569	618
16.	Tamil Nadu	205000	29510	7810	1222
17.	Tripura	7000	530	0	0
18.	West Bengal	25000	0	0	0
19.	Telangana	50000	16239	63508	11289
Total		1933250	300510	12,82,823	2,17,258

ANNEXURE-II**State-wise oil palm area expansion target under NMOOP from 2017-18 & 2018-19.****Oil Palm Area coverage (ha)**

S. No.	State	Current area coverage	Target		Coverage by 2018-19
			2017-18	2018-19	
States					
1	Andhra Pradesh	150530	11500	12000	174030
2	Andaman & Nicobar Islands	1593	-	-	1593
3	Telangana	16239	2000	2500	20739
4	Karnataka	41431	1500	2000	44931
5	Tamil Nadu	29510	1500	2000	33010
6	Odisha	18484	2050	3000	23534
7	Goa	953	-	-	953
8	Gujarat	5054	550	600	6204
9	Chhattisgarh	2162	1500	2800	6462
10	Kerala	5769	50	100	5919
11	Maharashtra	1474	-	-	1474
	Total	273199	20650	25000	318849
NE states					
12	Mizoram	25741	5350	6000	37091
13	Nagaland	140	3000	3000	6140
14	Assam	570	3000	3000	6570
15	Arunachal Pradesh	330	3000	3000	6330
16	Tripura	530	-	-	530
	Total	27311	14350	15000	56661
	Grand Total	300510	35000	40000	375510

ANNEXURE-III**State-wise potential district covered under oil palm**

SL. No	State	Potential Districts	Name. of District
1.	Andhra Pradesh	8	East Godavari, Krishna, Nellore, Srikakulam, Vishakapatnam, Vizianagaram, West Godavari and Ananatapur
2.	Telangana	4	Nalgonda, Bhadradi, Suryapet and Khammam
3.	Chhattisgarh	11	Kanker, Mahasammund, Dantewada, Jagadapur, Sukma, Durg, Balod, Raigarh, Janjgir Champa, Bilaspur and Korba
4.	Gujarat	11	Anand, Tapi, Narmada, Bharuch, Panchmahel, Kheda, Navasari, Surat, Vadodara, Valsad and Chothe Udepur
5.	Karnataka	23	Belagaum, Uttar Kannada, Davangere, Haveri, Bellary, Gadag, Koppal, Raichur, chamarajnagar, Hassan, Kodagu, Mandya, Mysore, Chikmagalur, Shimoga, Bagalkote, Bijapur, Gulbarga
6.	Kerala	9	Trivandrum, Kollam, Alappuzha, Pathanamihitta, Kottaym, Ernakulam, Kozhikode, Malappuram and Wyanadu
7.	Mizoram	7	Aizwal, Kolasib, Lawngtlai, Lunglei, Mamit, Saiha and Serchhip
8.	Odisha	15	Dhenkanal, Gajapati, Ganjam, Jajpur, Mayurbhanja, Balasore, Boudh, Cuttack, Nawrangpur, Koraput, Nayagarh, Rayagada, Sonapur, Bargarh and Bhadrak
9.	Tamil Nadu	26	Trichy, Karur, Cuddalore, Perambalur, Thanjavur, Theni, Thiruvarur, Nagapattinam, Tirunelveli, Vellore, Villupuram, Pudukottai, Aryalur, Dindugal, Virudhnagar, Sivagangai, Kancheepuram, Triuvallur, Tiruvannamalai, Salem, Namakkal, Dharampuri, Krishnagiri, Coimbatore, Tiruppur and Erode
10.	Nagaland	6	Dimapur, Peren, Mokokchung, Wokha, Mon and Longleng
11.	Assam	3	Kamrup, Goalpara and Bongaigaon
12.	Arunachal Pradesh	8	Lohit, Changlang, Tirap, Lower Dibang Valley, East Siang, West Siang, L/Subansri and Papum Pare & East Kameng
	Total	131	

PATTERN OF ASSISTANCE FOR OIL PALM UNDER MM-II OF NMOOP

SL. No.	Components	Pattern of Funding	Rate of Assistance
1.	Planting Material	60:40 (General States) 90:10 (NE States)	Assistance @ 85% of the cost of planting material limited to Rs. 12,000/- per ha for entire land holding / planting area of the farmer.
2.	Maintenance Cost	60:40 (General States) 90:10 (NE States)	Assistance @ 50% of the cost during gestation period for 4 years with a ceiling of Rs. 20,000/- per ha @ Rs. 5,000 per ha from 1 st year to 4 th year for entire land holding/ planting area.
3.	Drip Irrigation	As per NMSA Guidelines	As per “Per Drop More Crop” sub scheme of PMKSY Guidelines. As per PMKSY @ Rs.27,000/- for General State and Rs. 30,000/-per ha for NE States
4.	Distribution of Pump Sets	60:40 (General States) 90:10 (NE States)	Diesel/Petrol/electric pump sets of capacity up to 10 HP @ 50% of the cost limited to Rs 15, 000/- per pump set as per the norms of PMKSY.
5.	Bore well at Oil Palm farm Water harvesting structure/ponds	60:40 (General States) 90:10 (NE States)	Assistance @ 50% limited to Rs. 50,000/- per unit subject to condition that these are not installed in critical, semi-critical and over exploited ground water zones. In case of water Harvesting structures/ponds/tanks for individual farmer, 50% of cost (construction cost – Rs 125 for plain/ Rs 150 per cubic meter for hilly areas) limited to Rs 75,000/- for plain areas and Rs 90,000/- for hilly areas including lining is proposed under NMSA.
6.	Establishment of Seed Gardens	60:40 (General States) 90:10 (NE States)	One time assistance for a maximum amount Rs 10.00 lakhs as subsidy for setting up a new seed garden in 15 ha area by Oil Palm farmers association/co-operative etc. The seed garden over an area of 15 ha each with the assistance of Rs 30.00 lakhs (Rs. 10 lakh in the first year and Rs 2 lakh each for 2 nd , 3 rd , 4 th , 5 th and 6 th year). In 7 th year, a block grant of Rs 10 lakh be provided.
7.	Inputs for Intercropping in oil palm	60:40 (General States) 90:10 (NE States)	Assistance @ 50% of the cost of inputs for inter-crops during gestation period for 4 years with a ceiling of Rs. 20,000 per ha for entire land holding/ planting area.

8.	Construction of vermi-compost units at Oil Palm fields	60:40 (General States) 90:10 (NE States)	@50% of the cost limited to Rs 15,000 unit of 15 meter length, 0.9 meter width and 0.24 meter depth at Oil Palm field/garden of the farmers.
9.	Machinery & tools	60:40 (General States) 90:10 (NE States)	Assistance up to 50% of the cost and up to the amount for equipments / tools. Any type of machinery used in oil palm cultivation.
10.	Special component for NE/Hilly States/LW Areas/regions including support for oil palm processing units	60:40 (General States) 90:10 (NE States)	50% of the actual cost estimated by PWD/CPWD limited to 20% of total outlay of the state for roads from oil field to nearest FFB collection/ processing centre. 50% of the cost limited to Rs. 250.00 lakh for a unit of 5MT per hour for newly planted oil palm area to the private oil palm developers & processors companies, involved by the State Governments. 25% of the cost limited to Rs. 25.00 lakh to existing units established by the public sector and private oil palm developers & processors companies involved the State Governments.
11.	Farmer's Training	60:40(Gen.States) 90:10 (NE States)	Rs 24,000/- per training for a batch of 30 farmers for 2 days (@ 400/- per participant per day)
12.	Training of Extension Workers/Officers/input dealers	60:40 (General States) 90:10 (NE States)	Rs 36,000/- per training for a batch of 20 officers for 2 days. (@900/- per participant per day).
13.	Demonstrations	60:40 (General States) 90:10 (NE States)	5 demonstration of 1 ha each in a block of new plantation of 500 ha or above being taken up on farmer's field.
14.	Research & Development (R & D) Schemes	100%	Need based support will be given for R&D and Extension activities by ICAR-IIOPR.
15	Training infrastructure support to ICAR	100%	Need based support to the ICAR Institutes on projects basis to strengthen training infrastructure for Oil Palm growers / farmers.
16.	Local Initiatives, Contingency including monitoring & evaluation and Operational costs .	60:40 (General States) 90:10 (NE States)	The respective implementing States will be allowed to utilize 1.0 % of the total allocation under MM-II on Oil Palm for contingency including monitoring & evaluation and Operational Costs, consultant services, exposé visits of farmers/ Seminar/ Conference / Workshop/ Mela etc. No permanent post will be created under the Mission.

ANNEXURE-V

Format for submission of monthly & quarterly progress report

Name of the state:

Reporting month:

Components	Target		Achievement		
	Physical	Financial (CS)	Physical	Financial	Total

Technical information

Area coverage	Target	Achievement	
Location of plantation	District	Block	Village
Source of planting materials			
No. of farmers under oil palm cultivation			
Average land holding of farmers			
Location of Procurement centers			
Location of processing factory			

Annexure-VI

Component-wise physical targets and financial allocation under Mini Mission II on Oil Palm of NMOOP for the next two years (2017-18 to 2018-2019).

(Rs. in lakhs)

Sl. No	Components	Units	GOI share		2017-18		2018-19		Total	
					Phy	Fin	Phy	Fin	Phy	Fin
I	Area Expansion inputs									
1	Planting material @ Rs. 12000/- per ha	ha	State	60%	2065	1486.8	2500	1800	45650	3286.8
			NE	90%	1435	1549.8	1500	1620	29350	3169.8
			Total			3500	3036.6	4000	3420	75000
2	Maintenance cost									
	1st year @ Rs. 5000/- per ha	ha	State	60%	2065	619.5	2500	750	45650	1369.5
			NE	90%	1435	645.75	1500	675	29350	1320.75
	2nd Year @ Rs. 5000/- per ha	ha	State	60%	0	0	2065	619.5	20650	619.5
			NE	90%	0	0	1435	645.75	14350	645.75
			Total			3500	1265.25	7500	2690.25	11000
II	Production inputs									
3	Drip Irrigation as per PMKSY @ Rs.27,000/- for General State and Rs. 30,000/-per ha for NE States.	ha	State	60%	8000	1296	9000	1458	17000	2754
			NE	90%	1100	297	1200	324	2300	621
4	Diesel/Electric Pump sets @ Rs. 15000/- per set	Nos.	State	60%	580	52	660	59	1240	112
			NE	90%	140	19	160	22	300	41

5	(i) Bore well @ Rs. 50,000/- per unit	Nos.	State	60%	300	90	330	99	630	189
			NE	90%	36	16	48	22	84	38
	(ii) Water harvesting structure / ponds @ Rs. 75,000/- for plains and @Rs. 90,000/- per unit for hilly areas.	Nos.	State	60%	150	68	170	77	320	144
			NE	90%	325	263	350	284	675	547
6	Establishment of Seed Gardens @ Rs. 10.00 lakh per garden	Nos.	State	60%	1	6	0	0	1	6
			NE	90%	0	0	1	9	1	9
7	Inputs for Intercropping in oil palm (ha) during gestation period from 1st to 4th year @ Rs. 5,000/- per ha	ha	State	60%	20650	620	45650	1370	66300	1989
			NE	90%	14350	646	29350	1321	43700	1967
8	Construction of vermi compost units @ Rs. 15,000/- per unit	Nos.	State	60%	350	32	350	32	700	63
			NE	90%	125	17	125	17	250	34
9	Machinery & tools		State	60%		222		256	0	478
			NE	90%		160		160	0	320
			Total			3803		5507		9310
III	Transfer of Technology Inputs									
10	Farmers Training @ Rs. 24,000/- per training	Nos (Batch)	State	60%	120	17	120	17	240	35
			NE	90%	108	23	110	24	218	47
11		Nos (Batch)	State	60%	15	3	15	3	30	6

	Training of Extension Workers/ Officers/input dealers @ Rs. 36,000/- per training		NE	90%	10	3	10	3	20	6
12	Research & Development (R&D) Projects on oil palm		IIOP R	100 %		80		103		183
			Total			127		151		278
	Grand Total					8232		11768		20000