

**Report of visit to Tamil Nadu state by Dr. M. Dutta, National Consultant (Oilseeds)
from 10th to 14th July, 2017**

A field visit was undertaken to Tamil Nadu state w.e.f 10th to 14th July, 2017 by Dr. M. Dutta, National Consultant (Oilseeds) to monitor the implementation of NMOOP, NFSM and CDP programmes.

Commissionerate of Agriculture (10.07.2017):

A meeting was held with Director, Agriculture and other officials of State Department of Agriculture at Chennai in which the following major issues emerged:

- Since the state is experiencing two consecutive years of severe drought condition, the assistance for irrigation may be enhanced as funds provided under PMKSY is not sufficient.
- The funding pattern between Centre and States may be enhanced from 60:40 to 75:25 considering the drought situation in the state.
- As large rice fallow areas exist in the state, the programme on Targeting Rice Fallow Areas (TRFA) may be extended to Tamil Nadu as well, if feasible with support for fencing of isolated fields.
- The assistance under water carrying pipes may be raised from Rs. 35/metre to atleast Rs. 50/metre.

The state has not submitted Annual Action Plan under Crop Diversification Programme (CDP) and was requested to submit the same immediately. It was informed that the state is implementing Electronic Clearing System (ECS), the equivalent of Direct Benefit Transfer (DBT) under which fund is transferred to the account of the farmer. The state has launched a special programme on Mission on Sustainable Dryland Agriculture (MSDA) with a total fund of Rs. 803.00 crore by dovetailing various schemes and converging different State Departments like Agriculture Engineering, Agriculture Marketing, Animal Husbandry etc. Under the programme, 1000 clusters of 1000 ha each will be created in next three years starting with 200 in the first year and 400 each in 2nd and 3rd year under pulses, oilseeds, millets and cotton.

A brief meeting was held with the Managing Director, Agricultural Marketing in which the procurement of agricultural produce by APMCs was discussed together with implementation of e-NAM.

Status of fund utilization:

(Rs. in lakh)						
Sr. No.	Year	NFSM			NFSM additional area	
		Allocation	Release	Utilization	Allocation	Utilization
1	2016-17	5438.00	4240.40	4164.46	600.00	597.11
2	2017-18	4113.33	18.81	-	-	-
NMOOP						
1	2016-17	1501.41	552.46	920.77	-	-
2	2017-18	1768.373	740.30	-	-	-

The seed situation is satisfactory, however it was requested by the state to allow age relaxation of varieties of pulses and oilseeds upto 15 years as older varieties are more popular and better suited for stress conditions.

Target of area and production during 2017-18 under pulses and oilseeds:

Under NFSM- Pulses as against the normal average area of 8.62 lakh ha, a target of 9.40 lakh ha has been fixed for the year 2017-18. The total area sown as on date, was only 53,400 ha largely due to deficient rainfall. Under NMOOP total area targeted was 6.20 lakh ha against the normal average area of 3.89 lakh ha, however the area covered so far is 34,000 ha only.

Crop	3 years average		2017-18	
	Area (ha)	Production (tonnes)	Area (ha)	Area sown (as on date)
NFSM-Pulses				
Red gram	63681	69529	60000	2800
Black gram	378033	315311	440000	24500
Green gram	221229	155469	236000	14400
Horse gram	85565	56591	86000	0
Bengal gram	6866	4383	8000	0
Other pulses	107049	53962	110000	11700
Total	862423	655245	940000	53400
NMOOP-Oilseeds				
Kharif-2017				
Groundnut	215000	441300	269300	29600
Sesame	16600	9900	23300	4400
Sunflower	2200	2900	3300	0
Castor	4900	1500	8500	0
Total	238700	455600	304400	34000
Rabi-2017-18				
Groundnut	112800	337000	230600	0
Sesame	30800	18500	76700	0
Sunflower	6100	5200	6700	0
Castor	300	100	1500	0
Total	150000	360800	315500	0

Rainfall Situation:

Season	Normal (mm)	2016		2017	
		Actual (mm)	Deviation	Actual (mm)	Deviation
Winter	31.3	2.9	(-91%)	39.1	(+25%)
Summer	128.0	112.6	(-20%)	122.6	(-4%)
South West	321.2	257.7	(-20%)	55.6	(-8%)
North East	440.4	168.3	(-62%)	-	-
Total	920.9	509.3	(-45%)	-	-

The state suffered highly deficient rainfall of (-) 45% during 2016-17. During the current year the cumulative rainfall from south west monsoon recorded from 1st June to 7th July 2017 is 55.66 mm against the normal rainfall of 60.2 mm during the comparable period with a deviation of (-) 8%. The state is undergoing two consecutive years of deficit rainfall.

Minikit supply:

Crop	Variety	Allocation (No.)	Supply (No.)
NFSM			
Red gram	LRG 41	7500	7500
	BRG 2	5000	4000
Green gram	IPM 02-14	2500	2450
Black gram	IPU 0243	3750	3750
NMOOP			
Groundnut	ICGV 91114	2500	2500
	Dharani	5000	2500
	K 9	2500	2500
Sesame	RT 351	10000	977
	RT 346	10000	14998
Sunflower	KBSH 53	2500	2500

Minikit supply of pulses during Kharif-2017 was deficient in 1000 No. for red gram variety BRG 2 and 50 No. for green gram variety IPM 02-14. The state requested to make up the deficit in red gram variety BRG 2 by compensating with 1000 seed minikits of variety LRG 41, but the request was not acceded to by the Crops Division, DAC&FW.

In case of oilseed minikits, shortfall of 2500 No. for groundnut variety Dharani and 9000 No. for sesame variety RT 351 have been reported, however the shortfall in sesame have been compensated through additional supply of about 5000 minikits of variety RT 346.

Seed requirement and availability:

Crop	Requirement (Qtl)	Availability (Qtl)	Deficit/Surplus (Qtl)	Remarks	
NMOOP-Oilseeds					
Groundnut (Variety -18)					
Below 15 years (13)	9910.00	6550.80	-3559.19	To be met from sources like NSC, GSSC etc.	
Above 15 years (5)	1750.00	839.26	-910.74		
Total	11660.00	7390.06	- 4269.93		
Sesame (Variety 7)					
Below 15 years (1)	100.00	17.70	-72.30	Department of Agriculture, TN	
Above 15 years (6)	145.00	33.17	-111.83		
Total	245.00	50.83	-194.13		
Sunflower (Variety 3)					
Below 15 years (3)	70.00	0	-70	Department of Agriculture, TN	
Castor (Variety 3)					
Below 15 years (3)	25.00	-	-25		
NFSM-Pulses					
Red gram (Variety 7)	1250	1520	+270	Department of Agriculture, TN	
Black gram (Variety 8)	11850	12942	+1092		
Green gram (Variety 5)	1500	1620	+120		
Horse gram (Variety 1)	200	270	+70		
Cowpea (Variety 1)	1200	1200	-		

The availability of seeds of oilseeds was in short supply as compared to the requirement, however, availability of pulses seed was in excess of the requirement.

Seed production target:

Crop/Variety	Class of seed	Area (ha)	Expected production (qtl)	Agency
NMOOP-Oilseeds				
Groundnut (Variety 10)	FS	2035	3052.5	Tamil Nadu State Seed Dev. Agency (TANSIDA)
(Variety 13)	CS	1930	28947	
Total		2133	32000	
Sesame (Variety 3)	FS	5	25	
(Variety 6)	CS	42	210	
Total		47	235	
Sunflower (Variety 2)	FS	7	42	
Castor (Variety 2)	FS	3	9	
Grand Total		2190	32286	
NFSN-Pulses				
Red gram (Variety 9)	FS	54	486	Department of Agriculture, TN
Variety (7)	CS	195	1755	
Total		249	2241	
Black gram (Variety 10)	FS	92	690	
(Variety 6)	CS	511	3832.5	
Total		603	4522.5	
Green gram (Variety 7)	FS	36.5	219	
(Variety 5)	CS	255	1530	
Total		295.5	1749	
Horse gram (Variety 1)	CS	117	702	
Cowpea (Variety 2)	CS	10	60	
(Variety 1)	CS	412	2472	
Total		422	2532	
Grand Total		1683	11747	

Salem District (11.07.2017):

At **Konganapuram Block, Katchupalli Village** groundnut variety K 6 grown in 1 ha area farmer by the Sri Vardharajan under seed farm programme was visited. The crop was sown on 9th June, 2017 and crop condition was satisfactory. The seed will be procured under buyback system through TANSIDA at Rs. 94/kg+Rs. 10/kg subsidy with 16% handling charges. In this area out of 1400 ha cultivable area, 1000 ha have been covered with 1300 farmers under FIG. Each FIG consists of 100 farmers of which 50 are the beneficiary farmers. Three farmers were included under seed farm with groundnut as the first crop that will be followed by green gram/cowpea/sorghum as second crop.

In the same village, green gram variety Vamban 2 was grown in 2.0 acre area by the farmer Sri Rajagopal under seed distribution programme with Rs. 25/kg subsidy. The crop was grown under line sowing and the crop condition was good.

A meeting was held in **Katchupalli Village** with the farmers in which the Chairman, Municipality was also present. A power sprayer was presented to the farmer Sri K Palanisami with a subsidy of Rs. 3000/-. The farmers requested to enhance support under PMKSY and PMKBY with ease in payment to beneficiaries under the latter.

In **Block Magudanchevadi, Village Kannantheri** farmer Sri T. Raju has grown groundnut variety TMV 7 with rain gun facility provided under NMOOP at a total cost of Rs. 31600/- by the department. The crop was in excellent condition and farmers requested for more such support.

In the same **Village** at **Korsaripethi Hamlet** farmer Sri P. Rangnathan has adopted demonstration of groundnut variety K 6 under rainfed condition. The crop was expected to provide 1500-2000 kg/ha yield, which is quite encouraging.

In the village, an **FPO, Kanchamalai** has been established for developing millet and groundnut based products. Various products developed from mixing of millets like sorghum, bajra, ragi and groundnut were exhibited. The products were of excellent quality and have good marketing potential as well.

At **Block Mechari, Village Mallikundan** an **FPO - Tanga Tamarai (Golden Lotus)** have been organized under the Chairmanship of Sri S. Sampat. A total of 1051 farmers are included in the group to produce pulses like green gram (variety CO 8 and Vamban 4), black gram(Vamban 4 &6), red gram (CORG 7) and cow pea (COCPU 7). The FPO has become an important seed production organization of pulses with a revolving fund of Rs. 40.00 lakh for procurement of seed for seed growers. The FPO has received funding from different departments of the State Government and Rs. 5.00 lakh support from SFAC. The FPO has all important farm implements including water tankers, which are provided on custom hiring basis. The FPO has agro-input supply unit as well as a millet processing unit which is under construction.

KVK, Sandhiyur (12.07.2017):

A visit was made to **KVK, Sandhiyur, District Salem** which is under TNAU, Coimbatore recently reorganized with Zone-X of ATARI, Hyderabad. The KVK has been assigned Cluster FLD programme of 20 ha each in green gram and black gram, but no CFLD on oilseeds. The KVK is implementing Seed Hub programme on pulses under which seed of green gram variety CO 8 and black gram variety of Vamban 6 will be produced. Three acres each of green gram, black gram and red gram have been planted. The green gram variety CO 8 grown in 2.5 acre areas was visited. The variety had infestation of YMV and has been spread twice. The KVK has been involved in the seed production programme. The target of seed production under seed hub as well as the area coverage under CFLDs will be achieved. However, the work on development of infrastructure facility under Seed Hub for which Rs. 35.00 lakh has been allocated, is yet to be initiated. As informed, the university is implementing the infrastructure development through centralized tendering, which has not been initiated yet. Revolving Fund has also not been received yet.

District Dharmapuri (12.07.2017):

At **Block Nallampalli, Village Pallayampudhir** farmer Sri T. Maadhu has been provided a subsidy of Rs.1.25 lakh for procuring a tractor at a total cost of Rs. 6.65 lakh. The fund has been transferred to the farmer's account through electronic clearing system. Subsidy for 3 tractors have been provided in the block. The farmer owns 3.0 acres of land part of which was used for

incorporation of silt brought from de-silted water bodies, which is being undertaken on a large scale by the state. The farmer has raised nurseries of ragi variety GPU 67 for transplanting. Another farmer Sri Chinnadurai has been adopting SRI technique of rice for the past 5 years. The variety grown was white ponni. At **Block Dharmapuri, Village Vennampatty**, the farmer Sri Arumugam having 10 acres of land has adopted seed production of groundnut variety K 9 in 2.5 acres area. The crop has been provided two irrigations and the crop condition was good. The crop showed symptoms of insect attack and was expected to yield 2500 kg/ha, which is quite good. Another farmer Sri Dinakaran has sown groundnut variety K 6. Seed procurement will be done by the department at a rate of Rs. 76/kg+Rs. 10/kg (Rs. 86/kg) subsidy. The total cost of seed per ha comes to about Rs. 18400/ha from which about 1500 kg seed could be harvested.

At **Karimangalam Block, Karimangalam Village** farmer Sri Chennappa Gownder was provided Rs. 1,00,000/- subsidy for purchasing a Massey Ferguson tractor at a total cost of Rs. 5.40 lakh under NFSM-Pulses.

At **Block Pannagarm, Village Muttur** farmer Smt Nanjammal w/o Sri Annamalai has taken up 2.0 acres of seed production of green gram variety Vamban 3. An average yield of 1000 to 1250 kg/ha is expected. The seed will be procured at a rate of Rs. 93/kg+Rs.15/kg subsidy (Total Rs. 108/kg) by the Department.

KVK, Paparapatty (13.07.2017):

The **KVK, Paparapatty** in **Dharmapuri District** under TNAU was visited. The KVK has been assigned CFLDs on groundnut (30 ha.), black gram (10 ha), green gram (20 ha) and gram (10 ha). The KVK could not start any sowing so far due to deficient rainfall and will start sowing once sufficient rainfall is received. The KVK has good millet processing and product development activities and has trained several women groups. It does not have any Seed Hub programme on pulses.

District Krishnagiri (13.07.2017):

At **Block Hosur, Village V. Agraharan** about 150 acres has been covered under transplanted pigeon pea. Farmer Sri Kamalesh Babu of the same village has transplanted pigeon pea in 1.25 acre area with drip irrigation. Variety BRG 1 with about 180 days maturity has been adopted, which is suitable for both vegetable and seed purposes. The pod is harvested at about 80% maturity, boiled, peeled and seeds are consumed as vegetable which is locally known as "Kurma". The pods for seeds are extracted for consumption as vegetable. Three pickings could be made from the crop with 2.0 tonnes of vegetable per acre (about Rs. 50,000/-) and 700 kg of seed per acre (Rs. 42,000/-). This providing returns of about Rs. 90,000/- per ha.

In the same Block at Village B. Chettipally farmer Sri Ravi has grown pigeon pea in 5 acres area under seed farm. 25 farmers with 60 acres area has been adopted by the Department for growing pigeon pea variety BRG 1 as rainfed crop.

In **Hosur Block** at **Village Panchakshipuram** farmer Sri Ishwar has grown pigeon pea variety BRG 1 in about 1.5 ha area. The crop was 75 days old and was in very good condition. A tractor has been provided to the farmer under NFSM-pulses.

At **Village Panchakshipuram** an entrepreneur-cum-community nursery grower, Sri Rajsekhar Reddy has established a protected community nursery on leased land under shade-net condition. In the nursery, seedlings of red gram, vegetables and flowers were grown in portraits with coco peat as the growing medium. The peat was treated with Pseudomonas and Trichoderma bio-agents. About 8.00 lakh seedlings are raised and sold per season with a total profit of about Rs. 10.00 lakh from the nursery. 15 days old seedling of pigeon pea is sold at 30 paise per seedling, while one month old marigold at Rs. 2/- per seedling.

KVK, Krishnagiri (14.07.2017):

The **KVK** at **Kuppam** is under an NGO, the Tamil Nadu Board of Rural Development. The KVK has 7 scientists in major disciplines like Horticulture, Soil Science, Agricultural Engg., Extension, Plant Pathology, Veterinary Science and Home Science. It has the mandate to conduct CFLDs in 20 ha area for red gram (NFSM) and 30 ha for groundnut (NMOOP). In red gram, variety BRG 2 and in groundnut, variety Dharani have been included with 50 farmers selected for red gram and 75 farmers for groundnut. The target of area coverage of CFLDs will be achieved. No Seed Hub programme has been assigned to the KVK. It was pointed out that the cost of CFLDs for groundnut is too low, which needs to be raised. The KVK is working on fruit crops like mango including its processing as mango is a major crop in this area. Mango fruit fly is a major problem for which pheromone traps are being used effectively by the KVK under a NABARD supported project.

Actionable points/issues:

- Tamil Nadu is experiencing acute drought condition for the past two consecutive years, hence support under irrigation may be enhanced including assistance for water carrying pipes. A contingency plan should also be prepared by the state in case the deficit rainfall situation still continues.

Action: SDA/NFSM/NMOOP/PMKSY

- The state has sizeable rice fallow areas, which may be utilized by extending Targeting Rice Fallow Areas (TRFA) in the state, if feasible.

Action: NFSM/NMOOP

- The shortfall in seed minikits supply and availability of seed particularly under oilseeds should be made up in future through proper coordination with Central/State Seed Agencies.

Action: SDA/Central & State Seed Agencies

- The Farmers Producers Organizations (FPO) like “Tanga Tamarai” and “Kanchamalai” on pulses, millets and oilseeds in district Salem are doing commendable job. Such FPOs may be organized in other districts as well.

Action: SDA

- The de-silting programme of water bodies and fertilization of fields with silt undertaken by the state is an encouraging step and should be extended further with convergence of various schemes. Similarly, the Mission on Sustainable Development of Agriculture initiated by the state integrating various disciplines is a welcome initiative.

Action: SDA

- Growing of transplanted vegetable pigeon pea in Hosur Block has excellent potential for enhancing income of farmers, hence needs to be extended to more number of farmers and more varieties of such type need to be developed.

Action: SDA/TNAU

- The state has not submitted Annual Action Plan under Crop Diversification Programme (CDP), hence should submit the same immediately.

Action: SDA

- The infrastructure development under Seed Hub on pulses at KVK, Sandhiyur in Salem district is yet to be taken up, hence needs to be initiated immediately.

Action: TNAU/ATARI-X



Kanchamalai FPO with millets and groundnut products



Distribution of tractor to farmer Sri T. Maadhu at Block Nallampalli, Village Pallayampudhir



Nursery of ragi at Village Pallayampudhir



Fertilization through silt in Dharmapuri



Distribution of tractor to Sri Chennappa District Gownder at Karimangalam Village



Green gram seed production at Village Muttur Block Pennagaram



Black gram seed hub at KVK, Sandhiyur



Seed hub on black gram at KVK, Sandhiyur



Farm implements at KVK, Sandhiyur



Transplanted vegetable pigeon pea seed production at Hosur



Transplanted vegetable pigeon pea with drip irrigation



Nursery of vegetable pigeon pea under shade net



CFLD on pigeon pea at Hosur

List of participating officers at Directorate of Agriculture, Chennai, TN (Date: 10.07.2017)

Sr.No.	Name of Officer	Designation
1	Sh. G. Navaneetha Karnam	DDA
2	Sh. George	DD (P&M)
3	Sh. K. Govindan	Consultant-NFSM
4	Sh. S. Aravindhana	Agril. Officer
5	Smt. E. Indhumathi	AO-Oilseeds
6	Smt. S. Anitha	AO-Oil palm
7	Sh. R.K. Parimelalacan	AO-Milletts
8	Sh. B. Selvalakshmi	AO-Paddy
9	Smt. Uma Maheswari	AO-Pulses

List of participating officers at Katchupalli, Kanganapuram Block, Salem District (Date: 11.07.2017)

Sr.No.	Name of Officer	Designation
1	Sh. K.K. Mani	Chairman, Municipality, Kanganapuram
2	Sh. K. Govindan	Consultant- NFSM
3	Sh. M. Sekar	DDA, Salem
4	Sh. R. Chehadurai	ADA, Konganapuram

List of participating farmers at Katchupalli, Kanganapuram Block, Salem District (Date: 11.07.2017)

Sr.No.	Name of farmers
1	Sri Ramasamy S/o Sri Kannadasamy
2	Sri Rajendran S/o Sri Chinnusamy
3	Sri Palnisamy S/o Sri Kulathaipiyam
4	Sri Rajendran
5	Sri Mumatham S/o Sri Patehamatham
6	Sri Muthu S/o Sri Muthu Gaunder
7	Sri Punusamy
8	Sri Varathunajan S/o Sri Yarnasamy
9	Sri Mani S/o Sri Ayyamuthu
10	Sri Parisasamy S/o Sri Pappu
11	Sri Kumar S/o Sri Muthusamy
12	Sri Iyyanan S/o Sh. Palani
13	Sri Ponumal S/o Sri Nallappan

**List of participating officers at Krishi Vigyan Kendra, Paparapatty, Distt. Dharmapuri, TN
(Date: 12.07.2017)**

Sr.No.	Name of Officer	Designation
1	Dr. P.S. Shamugam	Programme Coordinator
2	Dr. K. Indumathi	AP (Hort.)
3	Dr. M. Sangeetha	AP (Soil Science)
4	Dr. M.A. Veumila	AP (Ag. Extension)
5	Dr. R. Thangadurai	AP (Animal Science)
6	Dr. K. Jothilakshmi	AP (Home Science)
7	Dr. D. Ayyadurai	AP (Agronomy)

List of participating officials of Dharmapuri district (Date: 12/13.07.2017)

Sr.No.	Name of Officer	Designation
1	Smt. R.R. Suseela	JDA
2	Sri N. Rajendran	DDA
3	Sri S. Mathiyaz	AO
4	Sri M. Durai	AAO (M&E)
5	Sri K. Veerasamy	DDA (SS)

**List of participating officials of Nallampalli & Pennagaran Blocks of Dharmapuri District
(Date: 12/13.07.2017)**

Sr.No.	Name of Officer	Designation
Nallampalli Block		
1	Sri V. Amudhavalli	ADA
2	Sri R. Ramanathan	ASO
3	Sri G. Selvam	ADO
4	Sri P. Madhesh	ADO
5	Sri E. Arun	Block Technology Manager
6	Sri K. Karthikeyan	Asstt. Technology Manager
Dharmapuri District		
1	Sri E. Elangovan	ADA
2	Sri E. Sudha	AO
3	Sri P. Pushparani	AO
4	Sri Arunagiri	ASO
5	Sri Karthikeyan	AAO
6	Smt. Maheswari	Block Technology Manager
Pennagaran Block		
1	Sri Subramanian	ADA
2	Smt Palani P	ASO
3	Sri G. Jayam	Asstt. Technology Manager
4	Sri S. Saravanan	Block Technology Manager
Karimangalam Block		
1	Sri M. Murugan	Dy. AO
2	Sri N. Perumal	AAO

3	Sri G. Mayakannan	AAO
4	Sri K Sivanaganam	AAO
5	Sri M Mariappan	AAO

List of participating farmers at Karimangalam, Dharmapuri District (Date: 13.07.2017)

Sr. No.	Name of farmers	Village
1	Sri Soundarajan	Thelkonhalli
2	Sri Rajendran	Thelkonhalli
3	Sri Krishan	Nagareonpatti
4	Sri Murugen	KottunerPELLI
5	Sri Velu	Nagareonpatti
6	Sri Gandhi	Nagareonpatti
7	Sri Peruon	Nagareonpatti
8	Sri Sasirajan	Echaranpatti
9	Sri Selkanmal	Echaranpatti
10	Sri Kriappan	Thunbakhalli
11	Sri Shanmujan	Kuddakattury
12	Sri Peraonchi	Thunbakhalli
13	Sri Ravichandran	K. Mattur
