



Abstract

Agriculture - Budget Announcement 2016-17 - "Mission on Sustainable Dry Land Agriculture" in Tamil Nadu at a total cost of Rs.802.90 crore during the period from 2016-17 to 2019-20 – Administrative approval and Financial Sanction of Rs.296.16 Crore for the year 2018-19 – Orders - Issued.

Agriculture (DPAP) Department

G.O. (Ms) No. 205,

Dated :09.08.2018
திருவள்ளூர் ஆண்டு 2049
ஆடி 24-ம் நாள்

Read

1. G.O. (Ms) No.14, Agriculture (DPAP) Department, Dated 27.1.2017.
2. G.O. (Ms) No.31, Agriculture (DPAP) Department, Dated 09.2.2017.
3. G.O.(Ms) No.162, Agriculture (DPAP) Department, Dated 29.06.2017.
4. From the Director of Agriculture, Chennai-5, letter No. RFS2/96047/16, dated 22.06.2018.

ORDER:

In the Budget Speech 2016-17, the following announcement has been made by the Hon'ble Minister for Finance, Personnel and Administrative Reforms Department:-

"As promised in the Election Manifesto, a new scheme will be launched for Dry Land farming, focusing on improving the production and productivity of millets, pulses and oilseeds. Water conservation measures will be taken up as an integral part of this scheme. Mixed farming will be promoted in dry land areas by supporting mini-dairy and poultry units to supplement farm income".

2. In the G.O. 1st read above, administrative sanction for implementation of Mission on Sustainable Dryland Agriculture (MSDA) at a total outlay of Rs.802.90 Crore (ie., Rs.300.00 Crore from State Fund, Rs.240.00 Crore from NABARD fund and Rs.262.90 Crore by dovetailing from other Schemes) for 1000 dryland clusters within a period of 4 years from 2016-17 to 2019-20 was issued and financial sanction for a sum of Rs.13.50 Crore under State fund for 2016-17 was issued to kick start the project in 200 dryland clusters alongwith dovetailing a sum of Rs.1.08 Crore from ATMA fund during 2016-17. In the G.O. 2nd read above, an amendment was also issued in the matter..

3. In the G.O.3rd read above, financial sanction was issued for implementation of MSDA in Tamil Nadu during 2017-18 at a total cost of Rs.175.16 (State fund Rs.114.29 Crore and dovetailed fund Rs.60.87 Crore) i.e. Rs.146.00 Crore for carrying out the balance activities in 200 clusters and Rs.29.16 Crore for carrying out initial activities in 400 clusters during 2017-18.

(P.T.O....

4. In the letter 4th read above, the Director of Agriculture has sent two proposals under the "Mission on Sustainable Dryland Agriculture" as detailed below:-

Proposal – I:

The Director of Agriculture has requested to accord financial sanction for Rs.164 Crore for State Fund besides according permission to dovetail Rs.103 Crore from Government of India schemes as and when GOI accord administrative and financial sanction out of total outlay of Rs.296.16 Crore for the implementation of the Scheme during 2018-19 are as follows:-

- Focused engineering activities to overcome Soil Moisture stress.
- Rainwater Harvesting Structures for efficient harvest and storage of rain water.
- Motivating farmers to use Drought Resistant, short duration crops / varieties
- Technologies to overcome moisture stress from sowing to harvest.
- Activities Enriching Soil Health with application of manures and fertilizers.
- Collectivizing of farmers to enhance bargaining power of farmers while marketing farm produce.
- Value addition for higher price realization.
- Improving Socio-Economic status of farmers.

Activities carried out during 2016-17 and 2017-18

A) Phase I

1. Base line survey conducted – Rs. 25,000 / Cluster. Rs. 50 Lakh spent
2. Capacity building for 125 Officers and 46,450 Farmers. Rs.2.08 crore spent.
3. Formation of village level Farmers Club – Rs.10,000 / Club extended. 876 Farmers Clubs formed.
4. Entry Point Activities - Creation of Common Water Harvesting Structures – 210 Check Dams, 11 Village ponds, 32 Community ponds and 55 Ooranies deepened (in Ramnad district) – total 311 structures were established at a total out lay of Rs.10 Cr.
5. Ploughing - Rs.1250 / Ha. given as back ended subsidy to farmers. – A total sum of Rs.25 Cr extended to 2.11 Lakh Dry land Farmers.
6. Seeds (Millets, Pulses and Oil seeds) and other inputs like Bio Fertilizers, Seed treating chemicals distributed at 50 % subsidy. 2 lakh ha dry land area cultivated which covers 88,792 ha millets, 83,725 ha pulses, 16,166 ha oil seeds and 11,317 ha cotton. A total sum of Rs.50 Cr subsidy extended to all Farmers.
7. For establishing Water harvesting structures in Farmers Field such as Field Bunds, Farm ponds, Community ponds and deepening of Ooranies (in Ramnad district)–Rs. 15 Cr. spent @ Rs.7.5 Lakh / Cluster.
8. 200 Custom Hiring Centres established @ Rs.8 lakh / Cluster given as 80% subsidy to the rural unemployed youth for which Rs.16 crore spent.

9. Value addition Machinery units- **Mini Millet Processor, Mini Dhal mill, Mini Oil Expellers, packing machines etc.**, Vide GO 3 read above, 50 Units established as Pilot basis, for which Rs.5 Cr. Spent @ Rs.10 Lakh or 75 % of Project cost extended to active FPO or FPG of Collective Farming.
10. Animal Health Management activities were carried out for a sum of Rs.20 Cr @ Rs.10 Lakh / Cluster to the welfare of cattle of Dry land Farmers.

Under Phase I, a total Dry land Area of 2 lakh ha have been developed over 2.11 lakh farmers are benefited.

Phase II – 400 Clusters.

1. Base line survey completed at a total out lay of Rs.1 Crore @ Rs. 25,000 / Cluster.
2. Capacity building of Officers and Farmers for a sum of Rs.4.16 crore.
3. 1538 Farmers Clubs have been formed at village panchayat level
4. Creation of Common Water Harvesting Structures - Check Dams, Percolation ponds, Community ponds at village level – the works are being carried out at a total outlay of Rs. 20 crore.

Activities proposed to be undertaken during 2018-19

1.Land Development Activities

(a) Summer ploughing in each of the dryland farmer's fields before the onset of monsoon:-

Ploughing subsidy @ Rs.1250 / ha would be extended as back ended subsidy to the Farmers based on guidelines drawn by Agricultural Engineering Department at a total outlay of Rs.50 Crores (Rs.25 Crore under State Fund + GOI fund (NADP) Rs.25 Crore)

(b) Water harvesting structures:

To accord financial sanction for Rs.30 crore at the rate of Rs.7.5 lakh per cluster for 400 clusters for the construction of water harvesting structures **like Field Bunding, Farm Ponds, Community ponds, deepening of Ooranies (Ramnad district) as per the location specific requirements** approved by CDT. The work would be carried out by the Chief Engineer, Agriculture Engineering Department as per the 3rd G.O. read above.

2. Agronomic Intervention for 400 Dry land clusters

a)The DOA has stated that in G.O.Ms. 14, Agriculture (DPAP) Department dated 27.01.2017, has sanctioned a sum of Rs. 25 lakh for each cluster of 1000 Ha. (Rs. 2500/- per Ha) being the 50% subsidy towards agronomic interventions of crops like millets, pulses, oilseeds and cotton in Dryland clusters. The seed costs of these crops are not uniform and therefore uniform subsidy rate of Rs. 2500/- per ha cannot be allowed for all dryland crops. The subsidy calculated ranges from Rs. 260 - per Ha for Cumbu to Rs. 8000/- for Groundnut.

b) The seed rate for Groundnut is 200 Kg per ha. The cost of one kg of groundnut is around Rs. 80/- per kg. and it is volatile also. The cost of seed per ha. works out to Rs. 16000/-.

c) The guidelines issued by Government of India permit subsidy upto 60% under Seed Village Scheme for pulses and oil seeds. However, to maintain uniform subsidy rate of 50% under agronomic intervention, it is proposed to limit seed subsidy from 60% to 50% for the seeds distributed under **Seed Village Scheme** for Pulses and Oilseeds under MSDA programme. Therefore, the Government is requested to accord permission for limiting seed subsidy to 50 % only under **Seed Village** scheme under MSDA programme.

d) Seeds for crops like Maize, Sorghum, minor millets like Thenai, Samai, Varagu, Kudhiraivali & Bengal gram are not available / sufficient quantity not available in Agricultural Extension Centers (AECs). The Government was requested to accord permission for the purchase of **farmer preferred high yielding Truthfully Labelled Seed varieties / hybrids of sorghum, hybrids of Maize and minor millets** and to extend 50% assistance as Back ended subsidy, with a condition that the genuineness of purchase of seeds of these crops shall be verified by CDT.

e) Regarding Oil Seeds, if sufficient quantities are not available in AEC, it is requested that the Government may accord permission to the District Joint Director of Agriculture to purchase Oil seeds from **NSC/Certified Seed Producing Agencies and TANFED** after getting approval of District Agricultural Input Purchase Committee headed by the District Collector or PACCS to purchase inputs not distributed through AECs, following the procedures of Cooperative department. Further, in case of non-availability of these inputs in AECs or PACCS, farmers may be permitted to purchase the inputs from private agencies and extend back ended subsidy after verifying the genuineness by CDT.

f) The State Government as a Policy does not encourage the use of **Bt Cotton**. Therefore, seed subsidy is not proposed for Cotton.

g) MSDA is proposed to be complemented by dovetailing possible schemes necessitating extension of subsidy from two or more schemes to a single farmer involved in Dry land cluster. As it is not possible to extend subsidy from two or more schemes during a particular season for the same crop on same piece of land, it is necessary to relax this condition.

h) Hence, he has requested the Government to accord Administrative and Financial sanction for **Rs. 54 Crore** from State Fund and balance **Rs. 46 Crore**, to be dovetailed from existing Government of India schemes out of the proposed outlay of Rs. 100 Crore.

3. Institutional Strengthening – Support for Value Addition for Clusters

The Government is requested to accord sanction of Rs.15 Crore at the rate of 75% of the cost limited to Rs.10 lakh per Cluster for a total 150 Clusters from phase I and Phase II towards the purchase of required machinery for value addition of farmers produce by setting up of micro enterprises such as mini dhal mill, oil expellers, millet processing units, packing & sealing machines, etc., by

Farmers Producer Organisations/ Farmers Producers Groups formed under Collective Farming Scheme / active Farmers Clubs formed under MSDA.

4) Creation of Custom Hiring Centres / Agro Service Centres for Unemployed Rural Youth in the dry land Clusters:

The Government is requested to accord permission to dovetail a sum of Rs.32 Crore under "Sub-Mission on Agricultural Mechanization (**SMAM**) towards establishing 400 custom hiring centres at the rate of one custom hiring centre per cluster. Subsidy amount up to 80% of total cost limited to Rs. 8 lakh per custom hiring centre would be allowed to the rural unemployed youth for establishing custom hiring centres. The work would be carried out by the AED as per the SMAM guidelines.

5) Animal Husbandry

The Government is requested to accord administrative and financial sanction for a total sum of Rs.40 crore for all the components of the Animal Husbandry activities as indicated here under.

Abstract of Animal Husbandry Components.

Sl. No	Component	Budget (Rs in Cr)
1.	Optimising the Nutrient Profile of cattle	26.6
1(a)	Transport of mineral mixtures, campaign, publicity & other expenses.	1.4
2	Optimising the Reproductive Health	6.0
3	Optimising Udder Health	6.0
	Total	40.0

This above amount Rs.40 Cr. is proposed to be met from State fund.

7. Activity wise requirement of Mission fund and fund dovetailed under existing schemes for activities in Phase II 400 Clusters during 2018-19 as detailed below:

S.No.	Activities	Total Finance (Rs.in Cr.)	Source of fund (Rs.in Cr.)	
			Dovetailing fund	State fund
1.	Land development activities / Assistance for ploughing	50.0	25.0	25.0
2.	Establishment of water harvesting structures	30.0	--	30.0
3.	Agronomic interventions	100.0	46.0	54.0
4.	Assistance for Value Addition	15.0	...	15.0
5.	Assistance for Custom Hiring Centre	32.0	32.0	-
6.	Animal Husbandry activities	40.0	...	40.0
	Sub-Total	267.0	103.0	164.0

Proposal-II

Implementation of Phase III 400 Clusters to be identified during 2018-19 under Mission on Sustainable Dryland Agriculture

The Director of Agriculture has requested to accord financial sanction for Rs.27 Crore for State Fund besides according permission to dovetail Rs.2.16 Crore from Government of India schemes (ATMA) as and when GOI accord administrative and financial sanction out of total outlay of Rs.296.16 Crore for the implementation of the Scheme during 2018-19 and the objectives are as follows:-

Objectives of the project:

- (a) Focused engineering activities to overcome Soil Moisture stress.
- (b) Rainwater Harvesting Structures for efficient harvest and storage of rain water.
- (c) Motivating farmers to Use of Drought Resistant, short duration crops / varieties
- (d) Technologies to overcome moisture stress from sowing to harvest.
- (e) Activities Enriching Soil Health with application of manures and fertilizers.
- (f) Collectivizing of farmers to enhance bargaining power of farmers while marketing farm produce.
- (g) Value addition for higher price realization.
- (h) Improving Socio-Economic status of farmers.

Activities Proposed to be Undertaken During 2018-19

- **Baseline Survey**
- **Formation of farmers club**
- **Capacity Building programmes**
- **Entry Point Activities**

MODE OF IMPLEMENTATION

1) **Baseline Survey to be undertaken by CDT**

The Cluster Development Team (CDT) would visit each Village Panchayat, peruse records, interact with farmers and also conduct a walk-through **Baseline survey** to identify the followings,

- i. Farmer-wise dry land available in the village (In case, a farmer has both wet and dry land, the dry land alone will be taken up in the Cluster).
- ii. Present condition of Soil.
- iii. Present cropping practices followed and yield obtained.
- iv. Present availability of Animals with the dry land farmers.
- v. Present availability of Farm Machinery and Agro-Processing machinery in the villages concerned in each Cluster.
- vi. Present status of marketing of dry land agricultural produces, etc.,

2) Formation of farmers club:-

Village – Panchayat wise Farmers' Clubs called “Maanavari Grama Vivasayigal Membattu Kuzhu” (மாணாவாரி கிராம விவசாயிகள் மேம்பாட்டுக்குழு) would be formed at each Village Panchayat level in 400 clusters in 2017-18.

3) Capacity Building:-

Training and hand holding support is proposed to the department officials and farmers for better understanding of technical information and motivate them for adoption of good agricultural practices to increase the farm income in dry land agriculture . The Plan of Action shall include the followings:

Preparation of training course materials by Director of Agriculture, with inputs provided by Agricultural Marketing, Chief Engineer (Agricultural Engineering), Animal Husbandry, Registrar of Cooperative Societies, Tamil Nadu Agricultural University (TNAU) & Tamil Nadu University for Veterinary and Animal Sciences (TANUVAS).

- a. Training of District level master trainers by TNAU, TANUVAS & officers from Directorate of Agriculture.
- b. District level Training for Block level team and Cluster Development Team by KVK / Agricultural Research Station/ Department of Animal Husbandry and Veterinary Services.
- c. Training of 100 farmers including office bearers of Farmers Club, in each of the Village panchayat in the Cluster by District level trainers at a common place within the village.
- d. Exposure visit outside State / within the State / within district & crop demonstrations which would be given under ATMA scheme by dovetailing.

4) Entry Point Activities:

The Government is requested to accord Financial sanction for a sum of Rs.20 Crore @ Rs.5 lakh for cluster from the State fund for Entry point activities.

Entry Point Activities are undertaken at each cluster to motivate and encourage farmers to get involved in the mission. These activities identified by CDT and approved by district committee, would be taken up by the AED department as per the procedures of AED to create common infrastructure relating to agriculture such as water conservation structures like Check dams, Community ponds, Percolation ponds, Village ponds etc.,

The activity wise funds proposed in 2018-19 are give (n below.

S.No	Activities	Finance (Rs. in Cr)	Source of fund (Rs in Cr)	
			Dovetailing fund	State fund
1.	Baseline Survey	1.0	..	1.0
2.	Formation of Farmers Club	4.0	...	4.0
3.	Capacity Building	4.16	2.16	2.0
4.	Entry Point Activities	20.0	...	20.0
	Total	29.16	2.16	27.0

ABSTRACT OF FUNDS FOR THE YEAR 2018-19

S. No	Activities	Finance (Rs. in Cr)	Source of fund (Rs in Cr)	
			Dovetailing fund	State fund
Balance activities in Phase II 400 Clusters				
1	Land development activities / Summer Ploughing	50.0	25.0	25.0
2	Establishment of water harvesting structures	30.0		30.0
3	Agronomic interventions	100.0	46.0	54.0
4	Assistance for Value Addition	15.0	...	15.0
5	Assistance for Custom Hiring Centre	32.0	32.0	...
6	Animal Husbandry activity	40.0	...	40.0
	Sub-Total	267.0	103.0	164.0
Initial activities in Phase III 400 Clusters				
1.	Baseline survey	1.0	..	1.0
2.	Formation of Village level Farmers Clubs	4.0	...	4.0
3.	Capacity Building	4.16	2.16	2.0
4.	Entry Point Activities	20.0	...	20.0
	Sub-Total	29.16	2.16	27.0
	Grand Total	296.16	105.16	191.0

5. The Director of Agriculture has requested the Government to accord financial sanction for Rs.191.00 Crore from State Fund and to accord permission to dovetail Rs.105.16 Crore from GOI schemes as and when GOI accords administrative and financial sanction for implementation of already approved activities under this Dryland Mission.

6. The Government, after a detailed examination, accept the proposals of the Director of Agriculture and accordingly sanction a sum of Rs.296.16 Cr. (Rupees Two Hundred and ninety six Crore and Sixteen lakhs only) (State fund Rs.191.00 Crore and dovetailed fund Rs.105.16 Crore) for implementation of Mission on Sustainable Dryland Agriculture (MSDA) in Tamil Nadu during 2018-19.

7. The Government also issues the following orders:-

A. Phase II components

I. Ploughing

- (i) Sanction a sum of Rs.25 Crore under State fund out of total cost of Rs.50 Crore under the relevant head of account for giving back ended subsidy to farmers @ Rs.1250 / ha for taking up Summer Ploughing in 400 clusters (Phase-II) and to authorize Assistant Director of Agriculture concerned to draw the sanctioned amount and authorize to transfer it further to the concerned CDT.

- (ii) Accord permission to dovetail balance Rs.25 crore from the NADP scheme as indicated by CE (AE), AED for **Summer ploughing under land development activities.**

2. **Water Harvesting Structures:**

- (iii) Sanction a sum of Rs.30.00 Crore for the component viz., establishment of **Water Harvesting Structures** such as Field bunding, construction of community ponds, Deepening of ooranies (Ramnad district) etc. under **State Fund** for 400 Clusters (Phase II) at the rate of Rs.7.5 lakh per cluster under the relevant head of account.

3. (iv) Authorize the **CE (AE), AED** to draw the above sanctioned amount Rs.30 crore, and to authorize him to transfer it further to the concerned CDT.

Agronomic Interventions:

- (v) Sanction a sum of Rs.54 crore for the component, **Agronomic intervention** for extending 50 % subsidy to dry land farmers for the distribution of quality seeds, liquid bio fertilisers and bio-pesticides for Millets, Pulses, oil seeds and critical inputs for cotton, other than seed.

- (vi) Accord special permission for extending 50% seed subsidy of Rs.8000/- per ha for those farmers cultivating Groundnut under Agronomic Interventions for 400 Dryland Clusters, under Phase-II.

- (vii) Accord permission for limiting seed subsidy to 50 % only under Seed Village Scheme under MSDA programme.

- (viii) Accord permission to the District Joint Director of Agriculture to purchase Oil seeds from NSC/Certified Seed Producing Agencies and TANFED after getting approval of District Agricultural Input purchase committee headed by the District Collector. **If the seeds are not readily available at Agricultural Extension Centres, the farmers may be permitted to purchase quality seeds from the private agencies and extend back ended subsidy after verification of genuineness by CDT.**

- (ix) Accord permission for the purchase of **farmer preferred high yielding Truthfully Labelled Seed varieties / hybrids of sorghum, hybrids of Maize and minor millets, Bengal gram and Horse gram** and to extend 50% assistance as Back ended subsidy, with a condition that the genuineness of purchase of seeds of these crops should be verified by CDT, **if the seeds are not readily available at Agricultural Extension Centres.**

(x) Accord permission for allowing Farmers in Dry land clusters to avail subsidy under all schemes viz., ATMA, National Food Security Mission, (NFSM) Seed Village, National Agricultural Development Project (NADP), Tamil Nadu Cotton Cultivation Mission (TNCCM), Sub Mission on Agricultural Mechanization (SMAM) simultaneously as a special case by dovetailing, as it is a cluster based programme.

(xi) Accord permission to authorize **ADA** of concerned block, to draw the sanctioned amount under Agronomic interventions and transfer it further to concerned CDT based on the Cluster requirement.

4. **Value Addition Machinery**

(xii) Accord sanction of Rs. 15 Crore for a total 150 Clusters (from remaining 150 clusters in phase I + 400 clusters in Phase II) towards the purchase of required machinery for **Value Addition** of farmers produce by setting up of micro enterprises for the year 2018-19 in the potential areas by giving priority to **(i) active Farmers Producers Organization (FPO) / (ii) Farmers Producers Group formed under Collective Farming Scheme/ (iii) Farmers Clubs formed under MSDA, for the subsidy value of Rs.10 lakh per cluster or 75% of cost of the project whichever is lesser.**

(xiii) Accord permission to authorize Chief Engineer (AE), AED, to draw the sanctioned amount under this component and authorize CE, to transfer it further to the concerned CDT.

Custom Hiring Centres:

5. (xiv) Accord permission to AED to dovetail a sum of Rs.32 Crore under **“Sub-Mission on Agricultural Mechanization (SMAM)”** towards establishing 400 village level custom hiring centres at the rate of one custom hiring centre per cluster by extending 80 % subsidy not exceeding Rs.8 lakh / cluster.

Animal Husbandry Activities:

(xv) Sanction Rs.40 crore for Animal Husbandry activities to be implemented in phase II 400 clusters @ Rs.10 lakh / cluster as details below:-

Component	Budget (Rs. in Cr.)
Optimizing the Nutrient Profile of cattle	26.6
Transport of mineral Mixtures of Medicines	1.4
Optimizing the Reproductive Health Care	6.0
Optimizing Udder Health Care	6.0

- (xvi) Accord permission to authorize Director, Animal Husbandry and Veterinary Services, to draw the sanctioned amount to carryout the Animal Husbandry activities.

B. Phase III components:

- (xvii) Accord permission for a sum of Rs.29.16 crore to undertake initial activities such as conducting **Base line survey, formation of Farmers Clubs at village panchayat level, Capacity building and Entry Point Activities** for another new 400 clusters (Phase III) during 2018-19 (Rs.27 crore from State fund + Rs.2.16 Crore under ATMA)
- (xviii) Accord permission to authorize ADA of the concerned block to draw the sanctioned amount under **Base line survey, Formation of Farmers Clubs, and Capacity building programme** under Phase III 400 clusters and to transfer it further to the concerned CDT.
- (xix) Accord financial sanction for Rs.20 Cr. at the rate of Rs.5 lakh per cluster as financial assistance **for Entry Point Activities in Phase III - 400 Clusters.**
- (xx) Accord permission to authorize CE, (AE) of AED to draw the above sanctioned amount under **Entry Point Activities in Phase III - 400 Clusters** and authorize CE, AED to transfer it further to the concerned CDT.

8. The comprehensive revised Guidelines for the implementation of Mission on Sustainable Dryland Agriculture during the year 2018-19 are also appended to this order. The said guidelines shall be followed scrupulously without any deviation.

9. Out of total expenditure sanctioned for a sum of Rs.296.16 Crore vide paras 6 and 7 above, a sum of Rs.191.00 Crore being the State fund shall be debited to the following Head of Account:-

"2401 – 00 Crop Husbandry – 800 – Other Expenditure – State's Expenditure - KL Mission on Sustainable Dryland Farming

- (i) 09 Grants-in-aid – 02 Grants for Creation of Capital Asset
(DPC : 2401 00 800 KL 0923) – Rs.20,00,00,000/-
- (ii) 09 Grants-in-aid – 03 Grants for Specific Scheme
(DPC : 2401 00 800 KL 0932) – Rs.4,00,00,000/-
- (iii) 11 Subsidies – 01 Individual Based Subsidy.
(DPC : 2401 00 800 KL 1119) - Rs.164,00,00,000/-
- (iv) 33 Payments for Professional and Special Service –
03 Special Service.
(DPC : 2401 00 800 KL 3331) – Rs.1,00,00,000/-
- (v) 72 Training
(DPC : 2401 00 800 KL 7202) – Rs.2,00,00,000/-

10. The balance fund of Rs.105.16 Crore shall be dovetailed under the schemes i.e., NFSM, NADP, Seed Village, SMAM, ATMA and TNCCM and debited from the respective head of accounts.

11. This order issues with the concurrence of Finance Department vide its U.O.No.38797/Fin(Agri)/2018, dated 03.08.2018.

(BY ORDER OF THE GOVERNOR)

GAGANDEEP SINGH BEDI
Agricultural Production Commissioner
and Principal Secretary to Government

To

The Director of Agriculture, Chepauk, Chennai-5.
The Director of Horticulture & Plantation Crops, Chennai – 5.
The Commissioner of Agricultural Marketing & Agri Business, Chennai – 32.
The Director of Seed Certification, Coimbatore-13.
The Director, Animal Husbandry & Veterinary Services, Chennai –3.
The Registrar, Tamil Nadu Veterinary and Animal Sciences University, Chennai-51.
The Chief Engineer, Agricultural Engineering, Chennai – 35.
The Chief Executive Officer, State Level Nodal Agency,
Tamil Nadu Watershed Development Agency, Chennai – 32.
The Registrar, Tamil Nadu Agricultural University, Coimbatore – 3.
The Chief General Manager, NABARD, Chennai – 34.
The Pay and Accounts Officer (East), Chennai-8.
The Pay and Accounts Officer, Chennai-35.
The Principal Accountant General, Chennai-18(by name)
The Accountant General(G&SSA), Chennai-18
The Principal Accountant General (E&RSA), Chennai – 18.
The Accountant General (Audit), Chennai-18 (by name)
The Principal Accountant General (AAD), F&A cell / Audit I/II,
361, Anna Salai, Chennai – 18.

Copy to

The Special Personal Assistant to Hon'ble Minister (Agriculture), Chennai-9.
The Private Secretary to Addl. Chief Secretary to Government,
Finance Department, Chennai -9.
The Senior Private Secretary to Agricultural Production Commissioner
and Principal Secretary to Government, Agriculture Department, Chennai – 9.
The Private Secretary to Principal Secretary to Government, Animal Husbandry,
Dairying & Fisheries Department, Chennai -9.
The Private Secretary to Principal Secretary, Co-operation,
Food & Consumer Protection Department, Chennai- 9.
The Finance (Agriculture/BG.I/BG.II) Department, Chennai-9.
The Agriculture (WD1/AE1/AE2/OP3) Department, Chennai-9.
SF/SC.

//Forwarded by Order//

R. Kalanithi
Section Officer. 9/8/18

15.08.18
29.08.18

**COMPREHENSIVE GUIDELINES FOR the IMPLEMENTATION OF "MISSION
ON SUSTAINABLE DRY LAND AGRICULTURE" during
2018-19.**

A. FORMATION OF DRY LAND CLUSTERS

1. The Dry land cluster shall be of 1000 ha in extent within 1-5 village panchayats as contiguous as far as possible.
2. Then select the first village where highest extent of dryland available and then identify other villages abetting to the major village, having next higher dryland area to form a 1000 ha Cluster.
3. **In case of non-availability of 1000 hectares of Dry land contiguously in a cluster, two to four sub-clusters covering 250 hectares minimum shall be identified to form a single Dry land Cluster.**
4. No fallow land except Current Fallow should be selected for cluster.
5. The Dry land selected should have been cultivated at least in one season of the three previous years.
6. The Dryland should not be a garden land or land with Perennial crops.
7. While forming a Cluster, the whole village may be accommodated and partial inclusion of a village may be avoided.
8. It should be ensured that the dry land should not come under irrigation from Bore Well / Open Well.

B. FORMATION OF CLUSTER DEVELOPMENT TEAM (CDT):

- I. The Cluster Development Team (CDT) will be formed with the **Agricultural Officer / Deputy Agricultural officer** of the concerned Block as Cluster Coordinator.
- II. The members in CDT shall be
 - a) Veterinary Assistant Surgeon(VAS) of the concerned Veterinary Dispensary
 - b) Assistant Engineer / Junior Engineer of Agricultural Engineering Department
 - c) Agricultural Officer, Agriculture Marketing & Agri Business Department,
 - d) Assistant Agricultural Officers of Agriculture Department and Agricultural Marketing & Agri Business Department,
 - e) Block Technology Manager of ATMA
 - f) Assistant Technology Manager of ATMA
 - g) 3 to 5 lead farmers as nominated by Assistant Director of Agriculture.
- III. In case the identified area comes under more than one Veterinary Dispensary, then the VAS from the Veterinary Dispensary that covers the major area will be the Cluster Development Team member.

- IV. The base line survey would be conducted by CDT in each village selected after perusal of the records, interaction with farmers and by conducting survey.
- V. A Joint SB Account should be opened at DCCB / Nationalized Banks/ Commercialized Banks having core banking facility for easy transaction in the names of Agricultural Officer/Deputy Agricultural officer (Cluster Coordinator) and Asst. Engineer /Junior Engineer of Agricultural Engineering Department.
- VI. The expenditure should be made based on resolutions passed by CDT.

C) FUNCTIONING OF BLOCK LEVEL TEAM

- I. The Block Assistant Director of Agriculture is the **Coordinator** of the Block Level Team
- II. The members of Block Level Team are
 - 1) Scientist from TNAU / KVK,
 - 2) Assistant Executive Engineer of AED, &
 - 3) The Senior most Veterinary Assistant Surgeon in the Block.
- III. Block Level Team will guide and supervise the activities of their respective CDT

IV. District Level Team

The District Level Team headed by the District Collector, Project Officer DRDA, DRO, Joint Director of Agriculture, Regional Joint Director of Animal Husbandry, Executive Engineer - Agricultural Engineering, DD Marketing, DD Statistics, Professor & Head TNAU / KVK, District Manager - Lead Bank, District Development Manager - NABARD will guide and supervise the activities of all Clusters in the Mission area of the district.

D. Base Line Survey

The present status of selected cluster in MSDA, its needs and requirements should be identified with which Detailed Project Report (DPR) has to be developed. A sum of Rs. 25,000/- per Cluster is allotted for the preparation of DPR and documentation. **No NGOs / outside agencies should be engaged for DPR preparation.** The DPR should contain the following.

- i. Map of the selected cluster (Portion of village map)
- ii. Farmer wise, land and Dry land available with Survey number
- iii. Present nutrient status of the soil.
- iv. Existing water harvesting structures in the selected cluster.
- v. Demographic details of the village and all basic data of the cluster.
- vi. Existing cattle population.
- vii. Productivity for all crops.
- viii. Existing Marketing facilities.

- ix. Present scenario of Agriculture.
- x. Proposed crop/Variety /Good agronomic practices, Crop wise & Farmer wise area.
- xi. Water harvesting structures to be developed.
- xii. Proposed Entry Point Activities with Cost Estimate
- xiii. Proposed Land development/ water conservation structures and its cost estimates
- xiv. The cluster wise input requirements/Quantity required/along with time line for stocking and distribution.

Cost Split up for Rs.25000 is furnished below.

Participatory Rural Appraisal exercise	= Rs.5,000/-
DPR preparation	= Rs.10,000/-
Collection of Data for Base line Survey	= Rs.10,000/-

For each Cluster a minimum of 4 copies of DPR should be prepared. One DPR should be kept by CDT, second for ADA, third for JDA and one extra copy to be kept at ADA's office.

E) FORMATION AND FUNCTIONING OF FARMERS CLUBS

- I. Farmers Club should be formed at each Village Panchayat called, "Maanaavari Grama Vivasayigal Membattu Kuzhu" (மாணாவாரி கிராம விவசாயிகள் மேம்பாட்டுக்குழு)
- II. All the Dryland Farmers of the selected unit will be the members of the Club.
- III. **No need to register the Farmers Clubs under Societies Act.**
- IV. Each Farmers Club will be represented by **2 lead farmers** who are actively engaged in agriculture, will function as **President, and Secretary** of the Farmers Club concerned
- V. Farmers Clubs will function under overall guidance and supervision of the Cluster Development Team.
- VI. The Farmers Club should meet once in a **month** positively on every third Tuesdays, to discuss the progress and decide the activities of the mission. At least 50 farmers should attend the meeting.
- VII. The Farmers Club meetings be conducted in the village community hall/ Self Help Group building/ Village Panchayat Service Centres etc., and the minutes to be recorded by the Secretary concerned. The documents of Farmers Club should be kept in the custody of the President and perused by the CDT once in a month.
- VIII. Activities such as EPA, Ploughing and Common Water Harvesting Structures should be monitored and resolutions to be approved by concerned Clubs for releasing the fund. The resolution should include name of farmers, area ploughed, common works completed and fund released and it should be approved by at least 20 members.

IX. Farmers Clubs should maintain the following documents.

- Meeting Resolution Register.
- Members Register.

A sum of Rs.10,000/- would be spent by CDT for conducting meetings, documentations, and other contingencies.

F) CAPACITY BUILDING

- I. Training of State level Master Trainers would be imparted by TNAU, TANUVAS & with the participation of officers from Directorate of Agriculture, Directorate of Agricultural Marketing & Agri Business, Agricultural Engineering Department and Directorate of Animal Husbandry & Veterinary Services.
- II. District level Training for Block level team /CDT would be given by KVK / Agriculture Research Station/ line department officials with the participation of State level Master Trainers.
- III. The CDT and Block level team would give training to a minimum of 100 farmers in each Village Panchayat of the Cluster.

The cost norms are given below

The ATMA – SSEPERS norms of Guidelines for State level, District level and Village level trainings, Exposure visits and Crop Demonstrations have to be followed as detailed below.

1. Rs.1000/ each will be allocated for State level Master trainers. In each district, 5 Master trainers (Officers) will be trained.
2. Rs.400/- each will be allocated for district level trainers(Officers). In each Cluster, 5 Officers will be trained
3. **At village level, 100 Farmers including President and Secretary of the Farmers Clubs will be given training by CDT and Block level team. Each Farmer will be given Rs.100/-. Total number of Farmers to be trained per cluster is limited to 500.**
4. Regarding **Exposure visits** to Farmers of Dry land Cluster, the following ATMA norms have to be adopted.
 - i) **Inter State visit** : This component will cover a maximum limit of 20 Farmers for 7 days programme and each farmer will be allocated Rs.800/-
 - ii) **Within the State** :This component will cover a maximum limit of 50 Farmers for 2 days programme and each farmer will be allocated Rs.400/
 - iii) **Within the District** : This component will cover a maximum limit of 40 Farmers for 1 day programme and each farmer will be allocated Rs.250/-.

iv) Exposure visit may be arranged at District level / State level to successful dry land clusters formed in 2016-17.

5. Crop Demonstration:

The ATMA – SSEPERS norms of Guidelines for Crop Demonstrations is to be adopted for the Pulses, Oilseeds and Millets as detailed below.

- i) Pulses (one acre demonstration) – Rs.3000/-
- ii) Oilseeds (one acre demonstration) – Rs.4000/-
- iii) Millets (one acre demonstration) – Rs.2000/-

G) ENTRY POINT ACTIVITIES:

The Entry Point Activities would be finalized by Cluster Development Team with the suggestions obtained from the Farmers Clubs. The Entry point activities should be a common water harvesting structures required for Agriculture such as, **Check Dams, village ponds, Sunken ponds and Community ponds**, which would be implemented by AED.

i. Check Dam: The check dam is to be constructed across gullies for harvesting of rain water and to assist in recharging ground water.

Location of check dams.

- When a series of Check dams are constructed in the same gully, the spacing between two check dams along the same gully should be such that the top of the check dam should be at the bottom level of the previous check dam.
- Core wall type is to be adopted where valley side bunds are strong and large. In this type, the body wall is extended and fastened into side walls. When valley flow is high, continuous and fluctuating and if the drop or fall is more than one meter, wing wall type of check dam is to be adopted. Wing wall type is supported with abutment, wing wall and returns.
- Selection of gully for constructing Check dams:- While selecting a gully to construct Check dams, the following points should be kept in mind.
 1. The gully should have sufficient catchment area. There should be run off from the catchment area.
 2. The gully should be a poramboke.
 3. The gully should not be used as cart tract, since farmers will oppose it.
 4. There should be banks on both sides to prevent inundation of adjoining fields on both sides.
 5. Check dams should not be proposed at turning point and bends of gully

ii) Community water harvesting structure (Percolation pond/ village pond):-

The Percolation pond site should be selected based on the following criteria.

1. The land should be poramboke:- If it is owned by an individual, the land owner should relinquish the land to Government.
2. The land should be permeable in nature.
3. If an individual agrees for construction on his land, the same will have relinquished by the land owner
4. The site should have sufficient catchment area to feed the structure.
5. Ideal site should have depth of water more than 1.2 m in 40 to 50 % of water spread area.
6. The surplus flow should have clear way without causing flooding and inundation

Technical points for Community water harvesting structure:

- 1) The **surplus weir** should be located in such a way that its cost is economical.
- 2) Sufficient provision shall be made for clearing the channel bed and sides so as to maximize the capacity.
- 3) The structure should be located suitably to minimize construction cost and increase the water holding capacity.
- 4) No sluice should be provided in the structure.
- 5) There should be enough number of irrigation wells or there should be scope for putting up irrigation wells in the zone of influence of the pond.
- 6) The surplus flow should have clear way without causing flooding and inundation.
- 7) The newly formed bunds for the percolation pond shall be properly consolidated and the Upstream and Downstream side slopes should be maintained as per technical standards.
- 8) Percolation Pond tank bund should be aligned in straight or smooth curve nature.
- 9) Sharp bend should be avoided.

H. COMPREHENSIVE LAND DEVELOPMENT ACTIVITIES

a. Ploughing

1. Ploughing should be done preferably by Five tynes duck foot Tractor drawn tiller to form Ridges & Furrows for effective rain water conservation.
2. A sum of Rs.1250 /- ha, will be extended as back ended subsidy.

3. Application in the prescribed format along with FCMS number should be obtained from the farmers in the dryland clusters by the CDT for availing this assistance. Chita / Adangal from VAO need not be insisted.
4. The Assistant Agricultural Officers concerned should verify the ploughing operation in the entire area of the cluster. 30% of area to be verified by CDT and 10 %, by Block level team.
5. Voucher obtained from the farmers should be certified by AAO and countersigned by the AO / Deputy AO and AE /JE of the concerned CDT.
6. The Farmers Club members should furnish the resolution on completion of ploughing which should be duly signed by at least 20 farmers in the cluster.
7. The CDT will make the payment to the beneficiary farmers through ECS as back ended subsidy in their respective bank accounts.

b. Water Harvesting Structures

The structure will be finalized by Cluster Development Team with the suggestions obtained from the Farmers Clubs by following the guidelines given below:

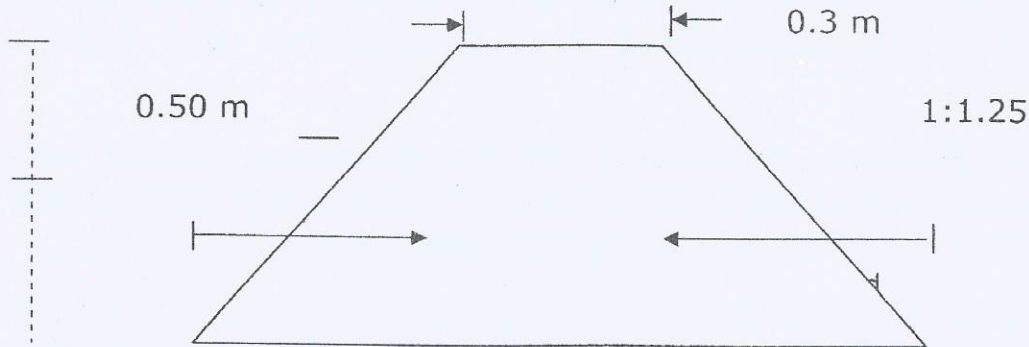
i. Field bunds:

In the lands with mild slope (2 to 10 %), field bunds shall be constructed to arrest soil erosion and to increase the soil moisture in the field by preventing run-off of rain water. Field bunds could be constructed along the field boundaries. However, bunding along the field boundaries should be restricted to only field boundaries falling across the field slope and with pipe outlets at suitable locations for safe disposal of excess run-off water. By dividing the field into several units, bunds control the volume and velocity of runoff in each such unit. The water in the field and the soil it is carrying are stopped at each bund. Bunding provides more opportunity time for water to infiltrate into the soil and help in conserving soil moisture.

ii. Cross-section of the Field Bunds:

The field bunds shall be formed preferably by engaging department Bull dozers with the following cross section.

Top Width : 0.30 m ; Bottom Width : 1.55 m ; Height : 0.50 m; Cross sectional area 0.4625 Sq.m Normally, the recommended length of bund per ha for 2 to 3% slope land is 160m to 250 m. The cost per hectare works out to roughly Rs. 3405/-.



However, depending on the field conditions, the length of bund/ha could be restricted so that more area could be achieved.

iii. Selection of fields / beneficiaries:

With the given allocation of Rs. 7.5 lakh / cluster of 1000 ha i.e Rs. 750/ ha, bunds could be formed only upto a length of 35m / ha if bunding is taken up for entire cluster area, which is very meagre. Also, it is not practically possible to take up bunds in all the clusters due to restrictions like type of soil, slope and willingness of beneficiary farmer etc. In lands with soil types of clay and black cotton soil, cracks will occur during dry season and the bunds will not be stable. Hence bunds are proposed to be formed only in the selected areas, wherever the fields are vulnerable for soil erosion and the farmers are willing to form bunds in their fields. The beneficiaries for the field bunding are to be selected by obtaining resolution from the farmers club and Cluster Development Team (CDT).

iv. Procedure to be adopted for the formation of Field bunds:

While forming the field bunds along the boundary of field, the following points should be adhered to:

1. Field survey is to be done.
2. To be executed in land with Slope of 2 to 10 %
3. Soil type - can be executed only red gravel soil and shall not be done on sandy/clayey soils.
4. Contour survey/poli survey with FMB sketch shall be done
5. Execution - Cross section as detailed above.
6. Excavation of soil to be done by machinery i.e. Bulldozer,/Front end levellers /JCB
7. Consolidation and sectioning to be done with a template which is to be made ready for maintaining perfection of shape

8. Measurement –

AE/JE – to do 100% field measurement

AEE - 75% check measurement

EE - 20 % counter check measurement

SE - 5 % Test check measurement

The following are the expected benefits of bunding under the scheme:

1. Field bunding is an effective *in-situ* moisture conservation measure in dryland.
2. It is suitable for lesser rainfall areas and the slope is < 10 %
3. It increases water holding capacity of the soil.
4. Reduces the soil erosion.

2.0 Farm pond

- Farm Ponds are basically small ponds preferably at the lowest elevation of the Farmer's fields to collect and store, run off from upper field in farms. The water stored in farm pond is used to give life saving irrigation at critical time during long dry spell.
- In clusters where bunding is not feasible and farmers are not willing, farm ponds are proposed to be taken up in the individual farmer's field and the beneficiaries for the same has to be approved by the farmers club and CDT.
- In the dryland clusters, farm ponds of different cross sections viz., 30m x 30m or of lesser cross section viz., 20m x 10m and 15m x 15m etc., are to be taken up with a depth ranging from 1.5m to 2m based on the field conditions and the willingness of the farmers for formation of farm pond.
- The water that could be harvested with the above cross sections of the farm pond are given below.

Farm pond of size : 30 m x 30 m x 1.5 m = 1350 Cu.m

Considering a minimum of 2 fillings in a year, the water that could be harvested is 2700 cu.m.

Farm pond of size : 20 m x 10 m x 1.5 m = 300 Cu.m

Considering 2 fillings in a year, the water that could be harvested is 600 cu.m.

Farm pond of size : 15 m x 15 m x 1.5 m = 337.5 Cu.m

Considering 2 to 3 fillings in a year, the water that could be harvested is 675 cu.m.

2.1 Points to be considered while formation of farm pond.

1. Farm ponds are formed in individual lands only.
2. Farmers written consent must be obtained.
3. Resolution is to be obtained from the farmers club and Cluster Development Team (CDT) approving the beneficiaries selected for farm ponds in the cluster.

4. The farm ponds are to be located in a lower end of field and that location must have sufficient catchments to supply run off to fill the farm pond
5. Farm pond should not be formed in sandy and loamy soil, because water stored in these ponds will easily percolate and no water will be available to give life irrigation to prevent wilting of crops.
6. The Farm pond should have an inlet and outlet
7. The sides of the pond should be sloped for stability.
8. Shoulder bunds should be formed around the pond and the bund top width 0.60m and side slopes 1:1¼ should be formed all around using excavated earth.
9. A uniform berm width of 0.60 m must be maintained all around.
10. Being a dugout pond, the capacity of the Farm Pond depends on the volume of excavation. Hence, maximum attention is to be given to increase the volume of storage.
11. When excavation is made using machinery, the rates permit the transport of earth up to 100m as initial lead. The excavated soil is normally used by the farmers in their own lands, which are adjoining fields. A provision for another 100m transport can be made in the estimate. If the farmer wants to transport the earth for faraway places, the cost has to be borne by him. Hence, a single extra lead is sufficient in the estimate.

I. AGRONOMIC INTERVENTIONS:-

The cluster wise area for cultivation of pulses, millets, oilseeds and cotton, based on the soil type, rainfall pattern and socio economic conditions will be finalized by CDT and preference of the farmers. After finalization of area, the following activities should be proposed by the CDT.

- i. Identification of the most suitable varieties, which is Drought Tolerant, Short Duration, which would be able to yield even in adverse conditions.
- ii. Mobilization of seed well before the commencement of season at least a month earlier.
- iii. CDT will ensure the adoption of appropriate crop management technologies suitable for the location.
- iv. Fortnightly inspection should be made by CDT during crop period and extending interventions needed at that time as assessed during inspections.
- v. Other improved technologies such as Integrated Nutrient Management (INM), Integrated Pest Management (IPM), Resource Conservation tools and Water application tools sanctioned in Centrally Sponsored schemes will also be dovetailed in the selected dry land Clusters to increase the crop productivity.

Inputs distribution

- i) 50 % subsidy is allowed for seed, bio fertilizers (Liquid / carrier) and seed treatment with bio-control agents such as *Trichoderma viride* and *Pseudomonas sp.*,
- ii) JDAs should assess the block wise and variety wise requirement of seed, Micro Nutrient and Bio Fertilizer in the Dry land Cluster in advance and ensure that required quantities of eligible varieties of seeds are stocked in AECs in time and as per season.
- iii) Required seed farms should be arranged well in advance for ensuring timely seed supply through AEC.
- iv) Seeds for crops like Maize, Sorghum, minor millets like Thenai, Samai, Varagu, Kudhiraivali, Bengal gram and Horse gram are not available / sufficient quantity not available in Agricultural Extension Centers (AECs), it is permitted to extend assistance as Back ended subsidy for **farmer preferred high yielding Truthfully Labeled Seed varieties / hybrids of sorghum, hybrids of Maize, minor millets, Bengal gram and Horse gram** with a condition that the genuineness of purchase of seeds of these crops shall be verified by CDT.
- v) Regarding Oil Seeds, if sufficient quantities are not available in AEC, it is permitted that the District Joint Directors of Agriculture to purchase seeds from **NSC or TANFED** as per the Tender Norms after getting approval of District Level Input Purchase Committee headed by the District Collector. Further, in case of non-availability of these inputs in AECs or PACCS, farmers are permitted to purchase the inputs from private agencies and get Back ended subsidy after verification of the genuineness by CDT.
- vi) The State Government as a Policy **does not encourage** the use of **Bt Cotton**. Therefore, seed subsidy is not allowed for Cotton. Hence, it is permitted **to extend subsidy for other critical yield enhancing inputs needed for cotton crop such as bio fertilizers, Micro Nutrient, Plant protection chemicals and Biocides, under Tamil Nadu Cotton Cultivation Mission (TNCCM)**.
- vii) It is permitted for allowing farmer in Dryland cluster to avail subsidy under all schemes viz., **National Food Security Mission (NFSM), Seed Village, National Agricultural Development Project (NADP), Tamil Nadu Cotton Cultivation Mission (TNCCM) and Agricultural Technology Management Agency (ATMA)** as a special case by dovetailing by following the respective norms and guidelines.

b. General Guidelines for all Crops

1. The primary objective of the scheme is to distribute quality seeds at 50 % subsidy to the farmers. The seed cost has to be worked out as per the prevailing TANSEDA rate.
2. Biofertilisers cost is worked out based on cost of the liquid bio fertilizers supplied by the Department. Carrier based bio fertilizer may also be used as per recommendations @ 50% subsidy.
3. Seed treatment chemicals for pulses may be allowed as back ended subsidy for the recommended quantity and subsidy amount not to exceed 50% of the actual cost.

c. Billing in the name of Farmers Club Office Bearer

1. A copy of resolution passed by the Farmers Club and duly approved by the CDT and signed by the individual farmers.
2. An application form should be given by Farmers Clubs for purchasing the inputs required for entire MSDA cluster farmers.
3. The online bill should be prepared in the name of President of Farmers Club for the entire Inputs in a single bill, and inputs to be collected and distributed to all Farmer members by the farmer's club office bearers.
4. An acknowledgement should be obtained from the individual farmers by the office bearers of Farmers Clubs after handing over the Inputs. The Assistant Agricultural officer of the Cluster should be responsible for handing over the acknowledgement to AEC.
5. Block Team & CDT to monitor the distribution of inputs purchased by Farmer Club to the individual farmers.

J. ESTABLISHMENT OF VALUE ADDED MACHINERY UNITS

I. Assistance for setting up of Value addition machinery unit:

A subsidy assistance of 75% of the project cost (including GST) is proposed, subject to a maximum of Rs.10 Lakhs for setting up of value addition machinery unit in a cluster.

II. Identification of beneficiaries for setting up of value addition machinery unit in the cluster:

Priority -1: Any active and willing Farmers Producer Organization (FPO) **within the cluster /block / vicinity of the cluster.** The FPOs formed by NABARD shall also be considered.

Priority - 2: Any Active **Farmers Producer Group (FPG)** formed through **Collective Farming** existing in the cluster / Block / vicinity of the cluster.

Priority- 3: Active **Farmers Clubs** formed through MSDA within the Cluster area / block / vicinity of the cluster.

III. Infrastructure facility:

The Farmers Producer Organization (FPO)/ Farmers Producer Group (FPG) selected for the purpose shall have required infrastructure facilities viz., building (owned / rental / leased) with adequate working space and storage space for raw material and finished produce, EB connection (single phase / 3 phase) required for running the machineries. They **shall be willing to contribute the non-subsidy portion (i.e.25% of the total cost of the detailed proposal)**. The FPO/FPG will prepare a detailed proposal seeking funds of 75% of the total cost or Rs.10 Lakhs inclusive of GST, whichever is less. The Working Capital should not exceed 20% of the total Project cost.

If there is any common infrastructure or Govt. building available within the cluster and suitable for setting up of micro enterprise, then the Block Development Team (BDT) in co—ordination with the District Level Committee (headed by District Collector) shall facilitate to rent out the building for the identified FPG/FPO at nominal rent.

IV. Identification of Machinery:

1. Machinery identification shall be based on the predominant crops grown in the cluster area and the level of value addition proposed to be taken up for the produce. In other words, only such machinery is to be put up in the cluster which will be helpful for Value Addition of major crops grown in the Dry Land clusters in the region.
2. AED officials shall help the identified FPG/FPO in selecting the machinery for the cluster from the list of empanelled and approved value addition machinery by AED.
3. Preferably, Combined Machinery Package including all kinds of machinery **(from cleaning, grading to packing machinery)** suitable for different crops for value addition shall be proposed so that a multipurpose value addition machinery unit shall be established. This will facilitate running of the value addition centre using the machinery for minimum of 8 to 9 months in a year, so that it can be the utilized for value addition of products from various crops.
4. In order to increase the capacity of the unit, taking into account the demand prevailing in a cluster, more than one unit of particular machinery shall also be permitted, for the value addition unit to be set up in a cluster. The Value Added Machinery should be preferably put in such location of the cluster that facilitates easy marketability of the End-produce.
5. If required more than one FPO/FPG in neighboring clusters can be permitted to join together for setting up a bigger value **addition machinery**

unit if the cost in setting up a single unit is more than Rs.10 lakhs. The allocation for the respective clusters ' can be pooled together for the purpose.

V. Approval of the identified FPG/ FPO:

1. The Cluster Development Team will take the lead role in identification of the FPO/FPG who will run the Value Addition Machinery Unit in the cluster. The JD (Agriculture) should, through District Collector, issue a Press release informing the FPOs/FPG to apply to the Cluster Development Team (CDT) for setting up of Value Addition Machinery Unit based on the guidelines stated above. This should also be highlighted in the Agriculture Grievance Day meeting for the benefit of farmers. The identified and interested FPO/FPG shall submit the willingness application to the Cluster Development Team headed by the Agricultural Officer concerned who will recommend to the Assistant Executive Engineer (AE) of the respective sub-division for setting up of micro enterprise in the cluster area with the details of machinery to be purchased with all relevant documents viz., registration of the FPO/FPG.

2. The Assistant Executive Engineer (AEE) concerned shall assess the list of the value addition machinery proposed, taking in to account of demand in the cluster after field verification of the infrastructure available with the Farmers Producers Organization(FPO)/ Farmers Producer Group (FPG) and then forward the application to the **District Committee** for **approval**.

2. **The District Level Committee headed by the District Collector** comprising of members viz., Joint Director of Agriculture, Executive Engineer (Agricultural Engineering) and Deputy Director (Agricultural Marketing & Agri Business). would approve the Micro enterprises proposed by the FPO / FPG

VI. Issue of Work Order:

The Assistant Executive Engineer (Agricultural Engg.) of the concerned sub division shall issue work order to the empanelled company for the supply and installation of machinery on getting the beneficiary contribution i.e. non-subsidy portion in the form of Demand draft in favour of the selected company and the following documents from the FPO/ FPG approved for the setting up of value addition machinery unit.

1. Resolution of the FPO / FPG concerned.
2. FPO/FPG shall furnish the document for registration. The machinery should be supplied and installed by the company within 30 days from the date of issue of work order.

VII. Mode of Purchase of Machinery:

1. Agricultural Engineering Department has to empanel the firms and approve the rates for the value addition machinery.
2. Empanelled list along with the rates shall be communicated to the districts so that the identified FPO/ FPG shall have the choice of the company from which the machinery could be purchased.
3. The machinery supplied should have a minimum warranty period of one year.
4. Adequate training has to be imparted to the farmers group /operator by the company which supplies the machinery.

VIII. Payment:

1. On supply and installation of the machinery by the approved company, AEE concerned shall inspect the unit and after getting satisfactory performance report of the running of the unit from the FPG / FPOs, shall recommend the invoice of the company for payment to the Cluster Development Team (CDT).

2. The FPO/FPG contribution in the form of demand draft obtained in favour of the firm shall be paid along with the work order to the firm. Remaining payment on the cost of the machinery after deducting the 5% withheld amount shall be made after installation and successful commissioning of the unit. The 5% withheld amount shall be released from the MSDA funds against the bank guarantee to be furnished by the supplier firm for the value of 5% of the cost of machinery, which is valid till the expiry of warranty period of one year.

3. Cluster Development Team (CDT) shall release the payment to the company based on the recommendation received from the Assistant Executive Engineer (AEE).

IX. Facilitation for running of the value addition unit:

1. Agriculture Officer (Agricultural Marketing & Agri Business) shall monitor the proper day to day running of the unit.

2. Assistant Engineer, (Agricultural Engineering) shall give the technical guidance and ensure proper functioning of the machineries.

3. Deputy Director (Agricultural Marketing & Agri Business) shall tie up the FPOs /FPGs for marketing the value added produce. Preference may also be given in Uzhavar sandhai for marketing of the produce.

General:

1. The Value Addition Machinery Unit shall be established in phased manner and only in the potential clusters in the district. The priority will be decided by Director of Agriculture and Chief Engineer, Agricultural Engineering Department.

2. If there is more demand and potential in a particular cluster, more than one value addition unit may also be permitted within a cluster.

3. **Totally 150 Value Addition Machinery Units** may be given to clusters of Phase I and Phase II during 2018-19.

4. Subsidy should not be extended to those groups from 50 clusters already benefited during 2017-18.

K. CREATION OF CUSTOM HIRING CENTRES / AGRO SERVICE CENTRES FOR FARMERS GROUP / UNEMPLOYED RURAL YOUTH IN THE DRY LAND CLUSTERS:

1. Custom Hiring Centers may be run by Cooperative societies of farmers/ Farmers Club / FPOs/ Rural Youth group and any such other entities in these villages with minimum 8 members in the selected villages of low farm power availability districts. The low farm power availability districts in the order of ascending order; 1) Ramanathapuram, 2) Thoothukudi, 3) Sivaganga, 4) Virudhunagar, 5) Perambalur, 6) Ariyalur, 7) Karur, 8) Krishnagiri, 9) Cuddalore, 10) Erode, 11) Tiruppur, 12) Coimbatore, 13) Pudukkottai, 14) Tirunelveli, 15) Madurai, 16) Namakkal, 17) Vellore, 18) Dharmapuri, 19) Villuppuram, 20) Salem, 21) Tiruvannamalai 22) Dindugal, 23)Thiruvallur
2. Villages will be selected from these low farm power availability districts.
3. Each village will be eligible for setting up of Agricultural Machinery and implements Custom Hiring Centres upto a maximum project cost of Rs.10.00 lakhs.
4. Financial assistance @ 80% of the project cost will be provided to such Custom Hiring Centres.
5. Interested groups should register their name in the Uzhavan App to avail subsidy under this component.
- a. In the case of Cooperative societies of farmers/ Self Help Group of farmers/ Farmers Club/ FPOs/ Rural Youth group and any such other entities in these villages running the CHC, they shall be registered under Registration of Societies' Act 1975.
- b. The Centre may choose any make and model of Agricultural Machinery and implements empanelled by the Agricultural Engineering Department for the year.
- c. On receipt of allocation of funds for the formation of Agricultural Machinery and Implements Custom Hiring Centre, the Cooperative societies of farmers/ SHG/ FPO/ Rural Youth group shall be informed to draw a Demand Draft for the total cost of the machinery including subsidy portion in favour of manufacturer / distributor only. After delivery of

- machine, the subsidy portion is to be released to the concerned farmer group's bank account number (i.e, Direct Benefit Transfer).
6. The Engine No. / Chassis No. of agricultural machinery and implements should be cross verified by Assistant Executive Engineer (AE) in the **Farm Crop Management System** of **Agrisnet** by using site address <http://www.tnagrisnet.tn.gov.in> in order to check any duplication of subsidy claim by the same Rural Youth's group in other departments also, since similar agricultural mechanization components are being issued on subsidy in Department of Agriculture and Department of Horticulture and Plantation Crops also. If the group already owns a machinery / implement, proof for the same should be ensured before the issue of the supply order. Those Machinery / Implement may also be included in the list of machinery / equipment of the Centre.
 7. The location of the Custom Hiring Centre should be in a place, where farmers can easily access the services.
 8. Open Yard with proper shelters should be arranged by the Centre for stationing the Machinery and Implements.
 9. The Centre should sign a Memorandum of Understanding with the Department for the effective delivery of their services.
 10. The Farm Machinery procured for the centre should be hired out to the needy farmers of the villages at the rates fixed by the Centre to take up timely farming operations.
 11. The hire charges of the machineries fixed by the Centre shall be at a rate less than the prevailing market rates. In the case of the Centre found fixing unreasonably very high Hire Charges, the District Level Executive Committee has the powers to interfere and fix a reasonable hire charges by taking in to consideration of all recurring costs (periodical maintenance, repairs & replacements, fuel, oils & lubricants, transportation charges, operator's salary, insurance premium, interest on capital etc.).
 12. The operation and maintenance of the machineries should be done by the Centre by availing the services of the machinery manufacturers and dealers.
 13. The Centre should ensure the safety and security of the Machinery and implements procured by them.
 14. A completion report for each Centre should be sent by the Assistant Executive Engineer (AE) to the Chief Engineer (AE) through the concerned Superintending Engineer (AE) along with a copy of the agreement.
 15. The Assistant Executive Engineer (AE) shall arrange to verify the records and functioning of the Centers at least once in a quarter and the Executive Engineer (AE) shall visit the Centers at least twice a year.

Annual reports on the functioning of the Centers may be sent to the Chief Engineer (AE)

L. Animal Husbandry Activities.

1. Optimizing the nutrient profile of cattle

- Cattle belonging to the farmers in the Dryland clusters will be provided with area specific mineral mixture to improve their general health.
- Though preference is to be given for crossbred animals, indigenous animals requiring intervention should not be excluded.
- **950 cattle** should be selected in each dry land cluster, and 14 Kg of **Area specific mineral mixture** to be supplied to each cattle. The cost of one Kg **Area specific mineral mixture** is Rs. 50/- and the total cost is Rs.700 per cattle. A sum of Rs.6.65 lakh / cluster will be allowed.

Selection of Cattle

- Selection of **cattle** for this component will be done by the veterinarian in the Cluster Development Team supported by Block Level Team as detailed in the project guidelines, from the members of the Farmers' Club.
- Those cattle that have not come to estrum even after 18 months since birth have to be examined. In case of heifers that belong to Indigenous breeds, those heifers that have not come to estrum after 24 months since birth have to be selected for intervention.
- Cattle that have long calving interval, repeat breeders (without any apparent infection and with normal ovarian structures and uterus on R/E), short lactation length, nutritional deficiencies etc have to be selected for intervention.

Selection of beneficiaries

- The owners of cattle that are showing the above have to be identified by the following mechanisms
 - Conducting animal health camps in the villages within the clusters utilizing the resources of farmers' club
 - By identifying such animals that are presented for treatment at the Dispensaries

- *The targeted beneficiaries must be selected from the farmers club of the cluster. Priority will be given to the club members. If sufficient numbers of animals are not able to identify from the club members, the village farmer's animals may be selected.*

Name of Veterinary Dispensary:		Name of Cluster:	
Sl. No	Name of Village	Name and address of beneficiary	No. of Animals

- The AD (AH) will scrutinize and approve the beneficiary list. The RJD (AH) will consolidate the cluster wise beneficiary list.

Procurement and supply of medicines

- Indents will be prepared by the Directorate of Animal Husbandry based on the number of clusters in each district as identified by Agriculture Department.
- The Directorate of Animal Husbandry will place indents for area specific mineral mixture with TANUVAS / TCMF.
- In the event of adequate quantity of mineral mixture not being available from the above organizations general mineral mixture will be procured through TNMSC.

2. Optimizing the reproductive health

- Animals with chronic reproductive health issues will be identified by the veterinarians in the cluster and provided treatment with the Reproductive health package.
- Members of the Farmers' club will be enlightened about the availability of such treatment packages in the cluster by the concerned Veterinarians in the periodical meetings to identify the animals with reproductive issues.
- **150 cattle** should be selected in each cluster and each cattle will be given one reproductive health package. The cost of one package is **Rs.1000/-**. Hence a total sum of **Rs.1.5 lakh** per cluster is allowed.

Selection of Cattle

- Selection of **cattle** for this component will be done by the veterinarian in the Cluster Development Team supported by Block Level Team as detailed in the project guidelines, from the members of the Farmers' Club.
- Those cattle that have not come to estrum even after 18 months since birth have to be examined. In case of heifers that belong to Indigenous breeds, those heifers that have not come to estrum after 24 months since birth have to be selected for intervention. Animals showing endometritis, abnormal discharges from vagina, history of abortions, history of recent calving but not showing estrus symptoms, Cows with long calving interval, repeat breeders (without any apparent infection and with normal ovarian structures and uterus on Rectal Examination), infections of uterus nutritional deficiencies etc have to be selected for intervention.

Selection of beneficiaries

- The owners of cattle that are showing the above have to be identified by the following mechanisms
- Conducting animal health camps in the villages within the clusters utilizing the resources of farmers' club
- By identifying such animals that are presented for treatment at the Dispensaries
- ***The targeted beneficiaries must be selected from the farmers club of the cluster. Priority will be given to the club members. If sufficient numbers of animals are not able to identify from the club members, the village farmer's animals may be selected.***

Name of Veterinary Dispensary:

Name of Cluster:

Sl. No	Name of Village	Name and address of beneficiary	No. of Animals (cows & heifers)

- The AD (AH) will scrutinize and approve the beneficiary list. The RJD (AH) will consolidate the cluster wise beneficiary list.

Procurement and supply of medicines

- Indents will be prepared by the Directorate of Animal Husbandry based on the number of clusters in each district as identified by Agriculture Department.
- The Directorate of Animal Husbandry will place indents for area specific mineral mixture with TANUVAS / TCMPI/ TNMSC.
- In the event of adequate quantity of mineral mixture not being available from the above organizations general mineral mixture will be procured through TNMSC.
- The contents of the Reproductive health package including antibiotics, supportive, intra-uterine infusions, hormones, anti-inflammatory, uterine ecbolics will be finalized at the Directorate and will be procured through TNMSC.

III. Optimizing udder health of cattle

- Cattle with poor milk production will be tested and identified for subclinical mastitis by the veterinarians in the cluster and provided treatment with the Udder health package.
- Members of the Farmers' club will be enlightened about the availability of such treatment packages in the cluster by the concerned veterinarians in the periodical meetings to identify the animals with subclinical mastitis.
- **150 cattle** should be selected in each cluster and each cattle will be given one Udder health package. The cost of one package is **Rs.1000/-**. Hence a total sum of **Rs.1.5 lakh** per cluster is allowed.

Selection of Cattle

- Selection of animals for this component will be done by the veterinarian in the Cluster Development Team supported by Block Level Team as detailed in the project guidelines, from the members of the Farmers' Club.

- Animals showing sub clinical mastitis shall be identified using California Mastitis Reagent supplied through IVPM **or from TANUVAS (TNLDA)**. In the event of unforeseen short supply from IVPM, the reagents will be procured through **TNLDA (TANUVAS)**
- Milk from cattle showing reduced milk production, change in colour and consistency of milk shall be tested using California Mastitis reagent and identified for further treatment.
- Adequate numbers of strip cups have also to be procured and supplied to the Veterinary Dispensaries through TNMSC / TANUVAS package.

Selection of beneficiaries

- The owners of cattle that are showing the above have to be identified by the following mechanisms
- Conducting animal health camps in the villages within the clusters utilizing the resources of farmers' club
- By identifying such animals that are presented for treatment at the Dispensaries
- The targeted beneficiaries must be selected covering each village in the cluster and the list be prepared with the following details

Name of Veterinary Dispensary:

Name of Cluster:

Sl. No	Name of Village	Name and address of beneficiary	No. of Animals

- The AD (AH) will scrutinize and approve the beneficiary list. The RJD (AH) will consolidate the cluster wise beneficiary list.

Procurement and supply of medicines

- Indents will be prepared by the Directorate of Animal Husbandry based on the number of clusters in each district as identified by Agriculture Department.
- The contents of the Udder health package will be finalized at the Directorate and will be procured through **TNMSC / TNLDA / TANUVAS**.

General

- The DAH&VS is permitted to use the savings amount in one component for incurring expenditure in other components and to re-allocate the funds within the packages based on need.
- Meticulous records be maintained at the Veterinary Dispensaries with reference to the beneficiary details and interventions provided
- The number of animals that respond favorably to interventions must be periodically reported to the Head Office in the appropriate format.
- Refractory animals must be subjected to other treatment protocols.
- Animals given the nutritional package must be evaluated on quarterly basis to assess the response to the intervention
- Documentation of the project at every stage of implementation will be done by the concerned veterinarians.

GAGANDEEP SINGH BEDI
Agricultural Production Commissioner
and Principal Secretary to Government

//True Copy//

R. Kalra
Section Officer. 9/8/18
B.B. 09.08.18