

## Agriculture (AP4) Department Secretariat, Chennai - 9

## Letter(Ms)No. 286, Dated: 22.09.2016.

From

Thiru Gagandeep Singh Bedi,I.A.S., Agricultural Production Commissioner and Secretary to Government.

To The Director of Agriculture, Chennai-5(w.e).

Sir,

Sub:- National Food Security Mission - 2016-17 — Administrative approval and Financial sanction under National Food Security Mission — Rice, Pulses, Coarse Cereals and Commercial Crops - Guidelines for implementation — Append along with Government Order — Regarding.

Ref:- 1. G.O.(Ms) No.192, Agriculture (AP4) Department, Dated 4.7.2016.

2. From the Commissioner of Agriculture, Letter No.GOI(2)/8152/2016, Dated 8.7.2016 and 30.08.2016.

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In continuation of the Government Order first cited, I am to enclose a copy of the guidelines for implementation of the scheme "National Food Security Mission (NFSM)" during the year 2016-17. The guidelines issued may be treated as an annexure to G.O.(Ms) No.192, Agriculture (AP4) Department, Dated 4.7.2016.

- 2. The Commissioner of Agriculture is directed to strictly follow the detailed guidelines while implementation of various components under National Food Security Mission Rice, Pulses, Coarse Cereals and Commercial Crops during 2016-17.
- 3. The Director of Agriculture and the Commissioner of Agricultural Marketing and Agri Business are authorized to issue necessary executive instructions, in continuation of the guidelines issued, as and when situation arises.

Yours faithfully,

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Copy to:

The Executive Director, Tamil Nadu Watershed Development Agency, Chennai-32(w.e).

The Commissioner of Agricultural Marketing and Agri Business, Chennai-32(w.e)

## **Agriculture (AP4) Department**

## **GUIDELINES FOR NATIONAL FOOD SECURITY MISSION - 2016-2017**

[Annexure to G.O.(Ms) No.192, Agriculture (AP4) Department, Dated 4.7.2016] GENERAL GUIDELINES

## 1. Publicity and Awareness

- I. On receipt of scheme target from Joint Directors of Agriculture (JDAs), the Block level Assistant Directors of Agriculture (ADAs) should effectively utilize the Form Crop Management System (FCMS) / AGRISNET in sending messages to all farmers in that block to register with Block ADA to avail the benefit of the scheme
- II. Wide publicity shall be given about implementation of various components of the scheme through Newspapers, AIR, meeting with farmers of villages to highlight about the practices, interventions such as Direct Seeding, Line transplanting use of stress tolerant varieties, cropping system etc., and about the schemes implemented in the District.
- III. Farmers shall be informed about the details of resource conservation tools for which subsidy can be availed besides booking of machineries available at custom hiring centres and for advance booking with Agriculture Engineering Department.
- IV. Door to Door campaign shall be conducted in selected villages of each district in a massive way.
- V. Farmer's friend of Agricultural Technology Management Agency (ATMA) to be involved for publicity work.

### 2. Identification of Villages under Various Components.

- I. Priority to Villages with area of more than 50 Ha and yield below the block average yield (Last 5 best years) shall be selected. This criteria shall be relaxed and extended to other villages in case if sufficient villages cannot be identified with this criteria.
- II. Villages with problematic soils shall be identified for application of productivity enhancing inputs.
- III. A list of selected villages shall be prepared by the Agricultural officers / Deputy Agriculture Officers concerned and submitted to the ADA.
- IV. The genuineness of selection shall be verified by the district DDA (GOI) and JDA.

### 3. Selection of Beneficiaries

- I. The name of the farmers expressing willingness to avail benefits under the scheme shall be entered in a priority register, maintained in the Agriculture Extension Centres (AECs).
- II. The Assistant Agricultural Officer (AAO) shall select the farmers from the priority register based on the seniority and shall obtain application in the prescribed format from the farmer along with the following documents.

- ✓ Farmers Integrated Hand Book (FIHB)/Soil Health card/Extract of chitta adangal.
- ✓ Voter ID card / Ration card / Aadhar card / FIHB/ Soil Health Card
- III. The beneficiary selected should find a place in the farm family register maintained by the AAOs.
- IV. Only farmers willing to co-operate and contribute a portion of the resources shall be selected.
- V. Selection of beneficiaries shall be done by adopting participatory approach by holding meetings in the village by explaining the objectives of the demonstration
- VI. Preference shall be given to SC/ST, SF/MF farmers, Women farmers, in that order for various components of the scheme. Allocation to SC(19%) / ST(1%) farmers shall be made in proportion to the population in the blocks.
- VII. Atleast 33% and 30% of the total allocation shall be made for small and marginal farmers and women farmers respectively.
- VIII. All the farmers are entitled to avail the assistance for various components of the Mission limited to 5 hectares in a season.
  - IX. Beneficiaries shall be identified by the AAOs concerned and veracity of the beneficiaries shall be checked by the A.Os / Deputy A.Os concerned.
  - X. The concerned Assistant Seed Officer shall select the beneficiaries for seed production and the seeds produced by the seed farm farmers should be procured as per the Seed Certification standards for extending production subsidy.
  - XI. A list of beneficiaries should be prepared by the Agricultural officers / Deputy Agricultural officers concerned and submitted to Assistant Director of Agriculture.
- XII. The list prepared shall be verified and approved by the Assistant Director of Agriculture. The genuineness of the beneficiaries shall be verified by the Deputy Director of Agriculture and Joint Director of Agriculture.
- XIII. A farmer is eligible for benefit under a particular component of this scheme only once. But the farmers can avail subsidy for more than one component
- XIV. The list of beneficiaries shall be uploaded in the AGRISNET / FCMS website.

#### 4. CRITERIA FOR SELECTING A DEMONSTRATION PLOT

- i. The demonstration should be conducted in a contiguous block by dividing the fields in two blocks, one for improved practices and the other for farmers practices in a cluster of 100 hectare or more. (for Minor Millets & Commercial crops 10 ha / cluster)
- ii. The lowest productivity areas / village in selected blocks should be given priority.
- iii. Demonstrations should be evenly distributed within and among selected clusters.

- iv. All farmers in a cluster should be included in a demonstration. For each farmer, at least 0.4Ha (1acre) area should be included in the demonstration.
- v. Demonstration site should be easily accessible to the farmers and the extension workers. It shall not be on an isolated field.
- vi. The selected site should be a true representative of soil type and soil fertility status of the area. The soil fertility status of the selected field should be known well in advance for deciding the use of fertilizer and soil ameliorants. Hence the beneficiary should compulsorily possess a valid Soil Health Card/FIHB.
- vii. Large blocks of crop areas shall be taken up for demonstration of production and protection technologies in a cropping system based mode.
- viii. The cropping system based approach shall entail that demonstrations are done in cropping sequence on the same plot of land.
- ix. A display board shall be installed at the demonstration plot with the following information
  - a) Number of farmers.
  - b) Name of village
  - c) Name of demonstration.
  - d) Fertilizers applied.
  - e) Bio-fertilizers applied.
  - f) Micronutrient applied
  - g) Date of sowing / transplanting
  - h) Seed rate and spacing
  - i) Any other critical input used.
  - i) Contact number of the officer responsible.
- x. More than one improved variety / Hybrid shall be included in one cluster demonstration.
- xi. Field days shall be organized at various stages of the especially during reproductive phase of the crop preferably at grain filling stage. As the demonstrations are laid with an aim to bring an impact of 10 times, more number of farmers in the vicinity should be invited to the field days.
- xii. The participation of Scientists from Tamil Nadu Agricultural University (TNAU) / Krishi Vigyan Kendras (KVKs) shall be ensured for critical observations and solutions for problems.
- xiii. Relevant extension literature like leaflets, pamphlets etc shall be made available to the participating farmers.

### 5. Arrangement for critical inputs

Seeds should be purchased by the farmers from the AECs.

- ii. The district JDA / DDA (SS)/ DDA (GOI) / ADAs should assess the entire quantity of inputs to be supplied from Department for demonstrations and make necessary arrangements to procure the same.
- iii. ADAs should procure the Seed, the receipt of stock should be verified and the cost of seed shall be directly adjusted in the Tamil Nadu State Seed Development Agency (TANSEDA) account.
- iv. The farmer's contribution and subsidy adjustment amount should be credited in TANSEDA account for all the seeds procured and distributed through TANSEDA.
- ➤ The District JDAs should assess the quantity of inputs supplied through Department Production Centres and place indents accordingly to Central Control Lab, Kudumianmalai for Micro Nutrient (MN) Mixture, Bio Control such as Pseudomonas / T.viridi /NPV to Bio Control Labs and liquid bio fertilizer/bio fertilizer to nearest Biofertilizer Production Units.
- > The receipt of stock for critical inputs shall be verified by the Assistant Director of Agriculture and the cost of input will be directly adjusted in the concerned receipt head.
- v. Online billing of inputs shall be done in the AECs (Wherever provided) and record of the transaction shall be maintained.

## 6. BACK ENDED SUBSIDY (SEED , NUTRIENTS , SOIL AMELIORANTS, WEEDICIDE , PLANT PROTECTION )

- i. For availing back ended subsidy by farmers, the AAOs should obtain the farmers details in separate application form with genuine bills, duly verifying the bank name, account number (along with IFSC code) of the farmers for online money transfer (ECS).
- ii. The beneficiary who avails the back ended subsidy should produce original purchase bill / evidence .
- iii. AAOs after ensuring the crops raised, procurement / application of inputs i.e., seeds (Maize & Lab lab- under coarse cereals demo), Weedicides / Foliar nutrient spray / Gypsum / PP Chemicals / seed sowing through Seed Drill for sorghum & Ragi ( rainfed ) / promotion of line sowing for Cumbu, Minor Millets / line transplantation for Ragi ( irrigated ) / Ridges and Furrows sowing for Maize etc., ( photograph during and after implementation should be enclosed) shall recommend the application to the Assistant Director of Agriculture through AO / Deputy AO for disbursing the cash component of the subsidy through ECS.
- iv. If the farmer preferred Hybrid seed is not available in AEC, Field functionaries shall ensure that the farmers purchase seeds only from seed producing agencies (NSC/SSCs/SAUs/ICAR Institutes/ Private Companies) authorized by the Department.
- v. Assistance for purchase of seeds will be available to selected farmers for the area not exceeding 2 ha each.

vi. Back-ended subsidy shall be released within 30 days from the receipt of related documents.

### 7. Reporting

- I. Results of the demonstrations should be compiled at Block, District and State level.
- II. Results of the demonstrations should be compiled in the form of documents and photos along with beneficiary shall be taken for documentation / success story.
- III. The AAO should ensure proper documentation (including photo and impact of the interventions) of this component.

## 8. Monitoring

- I. District Consultants / Technical Assistant of NFSM should monitor the conduct of demonstrations throughout the cropping season and shall document the success stories and report to the district level Project Management Team (PMT).
- II. The extension functionaries should visit the demonstration plots and arrange need based visits of scientists.
- III. The beneficiaries under this component should be provided with critical inputs in the second year so as to sustain and support their activities in the succeeding years.
- IV. Zonal officers from Headquarters should also randomly visit the beneficiaries and demonstration plots and ensure the proper implementation of the scheme.

#### 9. MACHINERY & RESOURCE CONSERVATION TOOLS

- i. The AAO / Deputy AO / AOs concerned shall assess the villagewise requirements.
- ii. The AAO shall identify the beneficiaries within the stipulated time and prepare a village wise list of beneficiaries.
- iii. 50% of the farmers selected for assistance for Farm Mechanization shall be those who have also been selected for cluster demonstrations.
- iv. The AAO shall canvass and receive applications for Agricultural Machinery / Implements from the farmers and online entry shall be made in the **Agrisnet portal**.
- v. A priority register should be maintained at the Block AEC office of Agricultural Department to register them chronologically, irrespective of financial year.
- vi. The farmers are free to choose any brand / make and any type of agricultural machinery and implements as per his / her choice from the empanelled and approved list given by the Agricultural Engineering Department
- vii. The subsidy is eligible for the farmers who purchase on or after 1.4.2016

- viii. This subsidy should be given to the farmers who have not been benefitted under any other schemes.
  - ix. AAOs should collect the application from the farmers along with vouchers for the purchase.
  - x. AOs and Deputy AOs should verify the vouchers and the purchase of machinery / implement with the farmer concerned in person and recommend for release of subsidy.
  - xi. The ADA should verify the application forms and send the consolidated statement to JDA along with the details of subsidy to be released, Bank account number and IFSC code of the beneficiaries after careful verification.
- xii. JDAs should release subsidy amount to the firms / companies directly through ECS after physical verification of purchase bill, supply of machinery to the beneficiary and undertaking from the firms / companies & beneficiary.

#### 10. TRAINING

- i. Training shall be organized for cropping system-based approach
- ii. Four sessions of each training, One at the beginning of kharif and rabi season, one each during Kharif and Rabi season shall be organized.
- iii. The training shall be imparted by crop/subject matter specialists of TNAU/KVKs on crop management (agronomic and plant protection practices) including primary processing of produce, storage etc.
- iv. A group of 30 participants / farmers in each session shall be invited and the participants for all the four sessions shall be same.
- v. Progressive farmers / Farmers raising the specific crop / Members of farmer's organization & Farmers interest groups / women farmers / rural youths interested in farming shall be identified for the training.
- vi. The age of participants shall be preferably between 20 to 50 years.
- vii. A sum of Rs 14,000/- per training (Rs.3,500/- per session) is admitted.

The item-wise breakup of training given as under:

Item	Rate (Rs.)	Amount for 4 sessions(Rs.)
Honorarium for one trainer	Rs.500/- per session	2000
Training material & stationery	Rs.500/- per session	2000
Refreshment for trainees, supporting staff	Rs.50/- head per session for 35 persons	7000
Contingency, POL transport etc.	Rs.750/- per session	3000
Total		14000

In addition to general guidelines, the component wise specific guidelines to be adhered are detailed below

## NATIONAL FOOD SECURITY MISSION- RICE

Component- a	:	Cluster Demonstration on Direct seeded Rice (one cluster of 100 ha each)
Rate of assistance	:	Rs 7500 per Ha.
Implementing Districts	:	Thanjavur, Nagapattinam, Thiruvarur, Cuddalore, Pudukottai, Ramanathapuram and Sivaganga

The item-wise breakup for the demonstration is as follows:

SI.No.	Input	Quantity	Source of Supply	Amount (Rs.)/ha
1.	Seed	40 Kg/ha	Department	(113.)/114
''	3333	l o rigina	Doparamont	1280.00
2.	Seed hardening 1% KCl	1 kg/40 kg of		20.00
		seed		
3.	Sowing with seed drill		Back ended	1500.00
4.	Weedicide ( essential )	200 ml/ha	subsidy	2000.00
5.	PPFM / Pseudomonas	1 lit/ha		300.00
	spray			
6.	Border crop- Redgram	2kg/ha		300.00
7.	Azadirachtin	1 lit/ha		600.00
8.	Paddy MN mixture	12.5 kg/ha		450.00
9.	Liquid bio fertilizer			
a.	Azospyrillum	500 ml/ ha	Department	300.00
b.	Phosphobacteria	500 ml/ha		
10.	Contingencies (field day			800.00
	and documentation)			
	Total			7550.00

Limited to Rs. 7500/ha

- a. Notified varieties less than 10 years are only eligible for the demonstration.
- b. Foundation & certified seeds shall be used for the demonstration.
- c. All improved package of practices like Seed hardening 1% KCI & seed treatment with Pseudomonas shall be followed in the demonstration field
- d. The demonstration on Direct seeded rice shall be laid most preferably in rainfed areas.
- e. If any savings, any other innovative technology may be followed

Component - b	Demonstration on Line transplanting – Back ended subsidy for Tray nursery / Mat nursery, machine planting and sowing of bund crop
Rate of assistance	Rs 7500 per Ha
Implementing	Thanjavur, Nagapattinam, Thiruvarur, Cuddalore, Pudukottai, and
Districts	Tiruvannamalai

The item-wise breakup for the demonstration is as follows:

SI.	Input	Quantity	Source of	Amount
No.			supply	(Rs/ha)
1	Seed	30 kg/ha	Department	960.00
2	Pseudomonas	10g/kg of seed		35.00
3	Raising of nursery in trays		Back ended	5000.00
	and planting by machine		Subsidy	
4	Border crop- Red gram	2kg/ha		300.00
5	Paddy MN mixture	12.5 kg/Ha		450.00
6	Liquid bio fertilizer		Department	
	Azospirillum	500 ml/ha		300.00
	Phosphobacteria	500 ml/ha		
7	Contingencies			800.00
	Total			7845.00

Limited to Rs. 7500/ha

- AAOs should collect the application from the farmers in the prescribed format who are interested to adopt nursery in tray/Mat, transplant the nursery using machine and sowing of bund crop ie., Red gram besides giving a certificate along with date of planting for claim of subsidy.
- > The farmers should produce the bills for machine planting, power weeding and chitta adangal / FCMS
- > AAOs and AOs/ Dy AOs should verify the area of machine planting within 15 days after transplanting and sowing of bund crop within 15 days and recommend for subsidy.

Component - c	Cluster Demonstration on stress tolerant varieties
	(Swarna Sub 1)
Rate of assistance	Rs 7500 per Ha
Implementing	Thanjavur, Nagapattinam, Thiruvarur, Cuddalore,
Districts	

The item-wise breakup for the demonstration is as above

- a. The demonstration on Swarna Sub-1 shall be laid in areas vulnerable to submergence. The variety may be cultivated by adoption of direct sown and transplanted method.
- b. Application from the farmers should be collected in the prescribed format with a certificate along with date of sowing for claim of subsidy.
- c. Proper bills should be obtained from the farmers for purchase of KCl, Weedicide, Azadirachtin, PPFM and seed drill sowing and Chitta adangal / FCMS
- d. The area of seed drill sowing should be verified within 7 days after sowing and border crop sowing within 15 days before extending back ended subsidy.
- e. Demonstration register should be maintained at AEC with details of input distribution and yield.
- f. If any savings, any other innovative technology relating to stress tolerance may be followed

Component - d	d. Cropping system based Demonstration – Rice - Pulses
Rate of assistance	Rs 12500 per Ha
Implementing	Thanjavur, Nagapattinam, Thiruvarur, Cuddalore, Pudukottai,
Districts	Tiruvannamalai, Ramanathapuram and Sivaganga

- 1. The subsidy shall be given to the farmers who cultivate Paddy followed by Pulses in the same field.
- 2. Pulses Area covered under this component should not be covered under NFSM (Pulses) or under any other demonstration.
- 3. The subsidy for Paddy is Rs 7500 per ha and Rs 5000 per ha. for pulses. The break up for Rs.7500/Hec. For demonstration of paddy is same in the component a, b, c

The cost split up for Pulses demonstration is furnished below.

SI. No	Input	quantity	Source of Supply	Amount (In Rs / ha)
1	Seed	30kg / Ha	Department	4500.00
2	DAP foliar spray 2%(2 spray)	12.5kg / Ha (two spray)	Back ended	1300.00
3	Weedicide (Pre or post emergence as per the need of the farmer)	500 ml/Ha		1050.00
4	IPM Package (Traps + lures, Azardiractin, need based chemical)			750.00
	Total			7600.00

Subsidy limited to Rs 5000/ha

- 4. AAOs should collect the application from the farmers in the prescribed format who involved in demonstration with a certificate along with date of sowing for claim of subsidy.
- 5. The farmers should produce the bills for purchase of weedicide, PP chemicals, Pusa hydrogel and should submit chitta adangal /FCMS
- 6. AAOs and AOs/Dy AOs should verify the area of sowing within 15 days after sowing and recommend for subsidy
- 7. Subsidy shall be released after completion of both demonstrations
- 8. An amount of Rs 800/ per ha shall be utilised for organising field day, distribution of publicity material, documentation and visit of scientists/GOI and State officials during the entire cropping system.
- 9. If any savings, any other innovative technology may be followed

## 2. Distribution subsidy for High Yielding Varieties of Certified Paddy seeds.

- a. Notified varieties less than 10 years are only eligible for the distribution subsidy.
- b. Foundation and Certified class seeds should be distributed.
- c. Block ADA should ensure to stock the required quantity at AEC.
- d. Paddy seeds distributed to the farmers through AECs are alone eligible for distribution subsidy of Rs 10/- per Kg.

Rate of assistance	:	Rs 1000 / qtl. Or 50% cost whichever is less
Source of inputs	:	Department
Varieties		All TNAU/National paddy varieties which are less than 10 years old are eligible
Implementing	:	Thanjavur, Nagapattinam, Thiruvarur, Cuddalore, Pudukottai,
Districts		Tiruvannamalai, Ramanathapuram and Sivaganga

## 3. Plant and Soil Protection Management

Component	:	Distribution of paddy MN mixture, Plant Protection chemicals / Bio agents
Rate of assistance	:	i) Rs 500 / Ha. or 50% cost whichever is less for Paddy MN mixture ii) Rs 500 / Ha. or 50% cost whichever is less for Plan protection chemicals / Bio Agents.
Source of inputs	:	Department – Paddy MN mixture ii) Back ended subsidy for PP chemicals / Bio Agents.
Implementing Districts	:	Paddy MN Mixture - Thanjavur, Nagapattinam, Thiruvarur, Cuddalore, Pudukottai, Tiruvannamalai, Ramanathapuram and Sivaganga Plant Protection chemicals / Bio agents - Thanjavur, Nagapattinam, Thiruvarur, Cuddalore, Pudukottai, Tiruvannamalai and Ramanathapuram

- a. The micronutrients shall be applied as basal/foliar method based on the recommendations of ICAR / TNAU.
- b. The subsidy is eligible for the farmers who purchase the PP chemical on or after 1.4.2016. This subsidy should be given to the farmers who have not been benefitted under any other schemes.

## 4. Resource Conservation Technique or Tools and Pumpsets

The Machinery must be ISI standard or certified by Farm machineries Training Institute of Government of India, CIAE, Bhopal or State Agricultural Universities.

## **Pumpsets**

- i. Financial assistance should be given for pumpsets upto 10 HP per farmer
- ii. The financial assistance shall be extended to all Pumpsets irrespective of the fuel being used.
- iii. Individual farmers / group of farmers as SHGs/Cooperative/other groups will also be eligible for the financial assistance provided the share of individual farmers is within the guidelines of NFSM and the repairs, maintenance and upkeep of the pumps are ensured by the groups.

Component	:	<b>Distribution of</b> a) Manual Sprayer b) Power knapsack sprayer c) Seed drill d) Rotovator e) Pumpset
Rate of assistance	:	a) Manual Sprayer - Rs.600/unit or 50% cost whichever is less b) Power knapsack sprayer - Rs.3000/unit or 50% cost whichever is less c) Seed drill - Rs. 15000/unit or 50% cost whichever is less d) Rotovator - Rs. 35000/unit or 50% cost whichever is less and e) Pumpset - Rs 10000/No or 50% cost whichever is less
Source of inputs	:	AED Empanelled firms & Back ended subsidy
Implementing Districts	:	a) Manual Sprayer - Thanjavur, Nagapattinam, Thiruvarur, Cuddalore, and Pudukottai b) Power knapsack sprayer - Thanjavur, Nagapattinam, Thiruvarur, Cuddalore, Pudukottai, Tiruvannamalai, Ramanathapuram and Sivaganga c) Seed drill - Thanjavur, Thiruvarur, Cuddalore and Ramanathapuram d)Rotovator - Thanjavur, Nagapattinam, Thiruvarur, Cuddalore, Pudukottai, Tiruvannamalai, Ramanathapuram and Sivaganga e) Pumpset - Thanjavur, Nagapattinam, Thiruvarur, Cuddalore, Pudukottai, Tiruvannamalai and Ramanathapuram

## 5. Cropping system based training

Component	:	Cropping system based training
Rate of assistance	:	Rs 14000 / training as per NFSM Norms - Four Sessions i.e. one before Kharif and Rabi seasons, one each during Kharif and Rabi crops) @ Rs 3500 / session – 30 Participants
Implementing Districts	:	Thanjavur, Nagapattinam, Thiruvarur, Cuddalore, Pudukottai, Tiruvannamalai, Ramanathapuram and Sivaganga

The break up is given in SI.No.10

# 6. Local Initiative - Paddy in Direct Sown Method using Seed Drill along with Green Manure crops

- a. AAOs and AOs /Deputy AOs / ADA should ensure the availability of Green manure seeds and collect the application form along with voucher for purchase of green manure seeds to avail the back ended subsidy
- b. AAOs and AOs should verify the cultivation of the Paddy in Direct sown method using seed drill along with Green manure crops in the ratio of 2:1 by adopting a spacing of 150 mm between 2 rows in wetland and incorporation of the Green manure crop will be incorporated in the field itself by using Power conoweeder on 30<sup>th</sup> day of sowing.
- c. After verification, the subsidy amount of Rs 400/- per ha will be disbursed as back ended subsidy to the beneficiary account directly through ECS.

Component	• •	Local Initiative - Paddy in Direct Sown Method by using Seed Drill along with Green Manure crops in the ratio of 2:1
Rate of assistance	• •	Rs 400 /- per ha. or 50% cost whichever is less
Source of Inputs		Back ended subsidy
Implementing Districts	:	Thanjavur, Nagapattinam, Thiruvarur, Cuddalore and Tiruvannamalai

#### 7. Other Initiatives

Component		Assistance for custom hiring of combine harvester and thresher			
Rate of assistance	:	Rs.1500/ha			
Source of Inputs		Back ended subsidy			
Implementing Districts	:	Thanjavur, Nagapattinam, Thiruvarur, Cuddalore,			
		Pudukottai, Tiruvannamalai, Ramanathapuram and			
		Sivaganga			

- Machines can be hired from existing Custom Hiring Centers and/or Custom Hiring Centres newly established.
- II. Small farm holders shall be given priority.
- III. Farmers shall be informed about the availability of the farm machinery in advance.
- IV. Separate Priority register shall be maintained for this intervention.
- V. Joint Directors of Agriculture shall coordinate with Agriculture Engineering department to ensure the availability of machinery before the peak season and to make alternate arrangements if there is any shortfall.
- VI. After verification, the subsidy amount of Rs 1500/- per ha will be disbursed as back ended subsidy to the beneficiary account directly through ECS

## NFSM - 2016-17 - PULSES - GUIDELINES

General guidelines for organizing demonstrations / Back ended subsidy should be adhered to.

Component - 1 : Demonstration on improved technologies- Cluster

Demonstration (of 100 ha each) – Pure Crop Demonstration

Rate of Assistance : Rs.5000 / Ha.

Varieties : All pulses varieties which are less than 15 years old are eligible.

## a) Red gram demonstration

S.No.	Inputs	Qty	Total Cost/Ha (in Rs)	Source of inputs
1	Seed	15 kg /Ha	1500.00	Department:
2	Trichoderma viride	2.5 kg/Ha	350.00	
3	Imidacloprid	5 ml/ kg of seeds	120.00	Back ended subsidy
4	Pulses MN Mixture	5 Kg / Ha	425.00	Department:
5	Liquid biofertilizer (Rhizobium – Pulses + Phosphobacteria)	500 +500 ml	300.00	
6	Pusa hydrogel (recommended in 0.1 Ha of 1 ha demo plot )	250 gms	450.00	Indent will be placed by concerned JDAs to the approved firm
7	Foliar spray of Nutrients	25 Kg / Ha.	1300.00	Back ended
8	Weedicides	Need based	750.00	subsidy
9	Plant Protection Chemicals	Need based	500.00	
10	Contingencies		200.00	
	Total		5895.00	
		Limited to Rs 50		

Amount saved in one component may be used for other component. Balance amount of Rs.895.00 will be borne by farmers under weedicides and foliar spray of nutrients component.

Districts covered: Vellore, Salem, Krishnagiri, Trichy and Karur.

## b) Green gram & Black gram and other pulses demonstration

S.No.	Inputs	Qty	Total Cost/Ha (in Rs)
1	Seed	20 kg / Ha	2000.00
2	Trichoderma viride	2.5 kg/ Ha	350.00
3	Imidacloprid	5 ml/ kg of seeds	150.00

		Limite	ed to Rs 5000/ha
	Total		6200.00
10	Contingencies		200.00
9	Plant Protection Chemicals	Need based	275.00
8	Weedicides	Need based	750.00
7	Foliar spray of Nutrients	25 Kg / Ha	1300.00
6	Pusa hydrogel((recommended in 0.1 Ha of 1 ha demo plot )	250 gms	450.00
5	Liquid biofertilizer (Rhizobium – Pulses + Phosphobacteria )	500 ml +500 ml	300.00
4	Pulses MN Mixture	5 Kg/ Ha	425.00

Amount saved in one component may be used for other component. Additional amount of Rs.1200.00 will be borne by farmers under weedicide and foliar spray component.

Districts

All districts except Thanjavur, Tiruvarur, Nagai, Kanyakumari, Chennai and Nilgiris.

Component - 2		Demonstration on inter cropping	
Rate of Assistance	:	Rs.7500/ Ha, Maximum 2 Ha/ Farmer	
Source of inputs		<b>Department:</b> DAP, Micro Nutrients, Seed, Trichoderma viride and Liquid biofertilisers, Remaining inputs through back ended subsidy.	
Varieties	:	All TNAU/National pulses varieties which are less than 15 years old are eligible.	

## a) Intercropping Green gram with Cotton

S.No.	Inputs	Qty / Ha.	Total Cost/Ha (in Rs)
	Pulses		
1	Seed	10 Kg	1000.00
2	Liquid bio-fertilizers (Rhizobium –	500 ml + 500 ml	300.00
	Pulses + Phosphobacteria)		
3	Foliar spray of Nutrients	12.5 Kg	650.00
	Cotton		
4	Cotton MN Mixture	12.5 kg	925.00
5	Trichoderma viride	2.5 kg	350.00
6	Weedicides- Pendimethalin	3.3 litre	1500.00
7	Plant Protection Chemicals	Need based	3100.00
8	Contingencies		200.00
	Total		8025.00
•		•	Limited to Rs 7500/ha

Amount saved in one component may be used for other component. Balance amount of Rs. 525.00 will be borne by farmers under Weedicide component.

## **District covered : Virudhunagar**

## b) Intercropping with Groundnut (Blackgram/Redgram)

SI.No	Inputs	Qty	Total Cost/Ha (in Rs)
	Pulses		
1	Seed	10 Kg / Ha	1000.00
2	Liquid bio-fertilizers (Rhizobium – Pulses + Phosphobacteria)	500 ml +500 ml/ Ha	300.00
3	Foliar spray of Nutrients	12.5 Kg/Ha	650.00
4	Trichoderma viride	2.5 Kg/ Ha	350.00
	Groundnut		
5	Seed Drill sowing		1000.00
6	Groundnut MN Mixture	12.5 kg/ Ha	600.00
7	Weedicides- Pendimethalin	3.3 litre/ Ha	1500.00
8	Plant Protection Chemicals	Need based	1500.00
9	Gypsum	400 kg	1200.00
10	Contingencies		200.00
	Total		8300.00
		Limit	ted to Rs 7500/ha

Amount saved in one component may be used for other component. Balance amount of Rs 800.00 will be borne by farmers under weedicide component.

Districts Virudhunagar, Tiruvallur, Kanchipuram, Vellore, Cuddalore, Tiruvannamalai, Thanjavur, Krishnagiri & Pudukottai

**Component - 3** : Cropping System Based Demonstrations

Rate of

Assistance

: Rs.10000/ Ha Maximum 2 Ha/ Farmer

Source of inputs

**Department**: DAP, Micro Nutrients, Seed, Trichoderma viride and Liquid bio-fertilisers. For Pusa Hydrogel – Indent will be placed by concerned JDAs to the approved firm. **Remaining inputs including Maize seeds as** 

Back ended subsidy

Varieties : All pulses varieties which are less than 15 years old are eligible.

Subsidy for weedicides / PP chemicals would be released after completion of demonstrations in pulses / maize.

## **Break up for Assistance**

SI.No.	Inputs	Qty	Total Cost/Ha (in Rs)
	Pulses		
1	Seed	20 Kg / Ha	2000.00
2	Trichoderma viride	2.5 kg/ Ha	350.00
3	Imidacloprid	5 ml/ kg of seeds/ Ha	150.00
4	Liquid bio-fertilizers (Rhizobium – Pulses + Phosphobacteria)	500 ml +500 ml/ Ha	300.00
5	Pusa hydrogel (recommended in 0.2 Ha of 1 ha demo plot )	500 gms	900.00
6	Foliar spray of Nutrients	25 Kg/ Ha	1300.00
7	Weedicides/ PP chemicals	Need based	1000.00
	Maize		
8	Seed and Seed Drill sowing	15 Kg/ Ha	2250.00
9	Maize M N Mixture	12.5 kg/ Ha	950.00
10	Trichoderma viride	2.5 kg/ Ha	350.00
11	Weedicides	Need based	1000.00
12	Liquid biofertilizers (Azospirillum	500 ml + 500 ml	300.00
	and phosphobacteria)		
13	Contingencies		400.00
	Total		11250.00
		Limited	l to Rs 10000/ha

Amount saved in one component may be used for other component. Balance amount of Rs 1250.00 will be borne by farmers under weedicides component for both pulses and Maize crops.

Districts Cuddalore, Villupuram, Salem, Coimbatore, Tiruppur, Erode, Ariyalur,

Perambalur, Theni, Dindigul and Tirunelveli.

Component - 4 Assistance for Production of Seeds (only less than 10 years old

varieties)

Rate of Assistance Rs.25/ Kg

**Varieties** 

Less than 10 yrs old varieties of Blackgram, Greengram, Redgram, as per

the target given. Preference may be given for TNAU released varieties

Recommendation Maximum of 4 Ha/ farmer/year. Hence more seed growers will be

encouraged.

Districts All districts except Chennai and The Nilgris.

#### **Guidelines**

- ➤ All the seed farm growers organized by TANSEDA growing less than 10 years variety of Foundation and certified seeds are eligible to avail the subsidy.
- ➤ The incentive will be provided to the farmers @ Rs 25/Kg of seed who produce and supply seeds to the TANSEDA on and after 1.4.2016

Component - 5 : Distribution of Seeds of HYV of less than 15 years old

Rate of

Assistance : Rs.25/ Kg

Source of inputs Department

Varieties All pulses varieties which are less than 15 years old are eligible. Preference

may be given for TNAU released varieties.

Recommendation: Maximum of 2 Ha/ farmer

#### **Guidelines**

ADAs should procure the seeds of less than 15 year varieties and to be distributed through AEC with subsidy of @ Rs 25 / Kg.

Component - 6 : Integrated Nutrient Management

Pulses Micronutrients @ Rs.500/ ha. (or) 50% of the cost whichever is less

Rate of Assistance

: Gypsum / 80 % Wettable sulphur @ Rs.750/ ha (including transport

charges) or 50% of the cost whichever is less

Source of inputs Micronutrients - Department

Gypsum /80 % Wettable sulphur - Back ended subsidy

Recommendation: Maximum of 2 Ha/ farmer

Districts : All districts except Chennai and The Nilgris.

Component - 7 : Integrated Pest Management

Rate of Assistance

a) Weedicides @ Rs.500/ ha. Or 50% of the cost whichever is less.

b) PP chemicals @ Rs.500/ ha. Or 50% of the cost whichever is less.

Source of inputs : PP chemicals and weedicides – Back ended subsidy

Recommendation : Maximum of 2 Ha/ farmer

Districts : All districts except Chennai and The Nilgris

## **Component - 8** : Resource Conservation Technologies

Rate of Assistance

 Rotavator – @ Rs.35,000/ No. or 50% of the cost whichever is less.

- Power knapsack sprayer @ Rs.3,000/ No. or 50% of the cost whichever is less.
- Tractor (40 70 HP as per SMAM Guidelines) to other farmers –
   @ Rs.1,00,000/ No. or 25% of the cost whichever is less.&
- Tractor (40 70 HP as per SMAM Guidelines) to SC/ST/SF/MF/Women farmers @ Rs.1.25 lakh/ No. or 35% of the cost whichever is less.
- Pumpsets @ Rs.10,000/ No. or 50% of the cost whichever is less.

Source of inputs : AED empanelment - Approved manufacturer / Dealers

Districts : All districts except Chennai and The Nilgris.

## Component - 9 : Efficient water application tools

Rate of Assistance

## Pipes carrying water

- > 50 % of the cost limited to Rs.50/ meter for HDPE pipes with maximum ceiling of Rs. 15,000/ beneficiary.
- ➤ 50 % of the cost limited to Rs.35/meter for PVC pipes with maximum ceiling of Rs. 15,000/ beneficiary.
- ➤ Sprinkler Rs. 10,000/ha or 50 % of the cost whichever is less

  Mobile raingun Rs. 15,000/Unit or 50 % of the cost whichever is less

Source of inputs . JDA / ADA will distribute the above components as per AED

/TANHODA approved rate contract.

Districts : All districts except Chennai and The Nilgris

#### **Guidelines**

AAOs should get the application forms from the farmers.

- Farmers should be given preference to select the pipe/ sprinkler/ Mobile Raingun manufacturer from the AED / TANHODA approved list of firms.
- Farmers should be guided to take Demand draft in favour of the selected firm for their contribution for eligible length of pipes/ no of sprinklers/ Mobile rain guns and concerned ADAs should ensure that water application tools are delivered in time.

➤ After ensuring that the concerned farmers received the good quality pipes as per invoice, eligible subsidy amount should be released to the concerned firm. Documentation after installation of pipes should be submitted. Subsidy should be released only after the verification by JDA/DDA.

Cropping system based training (Four sessions i.e one before Component - 10 : Kharif and Rabi season and one in each during Kharif and Rabi

season)

Rate of Assistance As per NFSM 12<sup>th</sup> Five Year Plan (FYP) Operational guidelines and

given in Sl.No. 10.

Source of inputs . Concerned block ADAs under the Supervision of DDA (GOI) and JDA

should conduct the training.

Recommendation . One training at the beginning of Kharif and Rabi season, one training

each during Kharif and Rabi season.

Districts : All districts except Chennai and The Nilgris

#### **Guidelines**

- Pre season training should be organized before the start of Kharif and Rabi season in all the districts & item wise break up of cost norms as already detailed.
- Consultants and Technical Assistants recruited under NFSM should be involved in the training programme
- > Training should cover the farmers from the potential pulses cultivable area as well as new area where pulse cultivation can be introduced.
- All the improved technologies followed in SPI village concept should be incorporated in the printing material along with market information and value addition. During the training, preparation of DAP spray solution, seed treatment etc., should also be demonstrated. Information on Value addition and marketing of pulses should also be included in the training to create awareness.
- Technical guidance may be availed from nearby TNAU/KVK/RRS. Scientists may be invited for Training.
- Proper documentation should be done for each training.
- ➤ Block wise date of conduct of training should be planned in advance and district wise consolidated details should be intimated to this office without fail.

Component - 11	:	Demonstration by NGOs (Local Initiatives) - Cluster Demonstration (of 100 ha each) - Pure Crop Demonstration
Rate of Assistance	:	Rs.8250 / Ha.

Source of inputs	:	<b>Department:</b> DAP, Micro Nutrients, Seed, Trichoderma viride and Liquid biofertilisers, – Indent will be placed by concerned JDAs. Remaining inputs - back ended subsidy.
Varieties	:	All pulses varieties which are less than 15 years old are eligible.
Identification of NGO		Suitable institutes/organizations including NGOs will be identified by the JDA Thanjavur based on the criteria suggested below:  (a) At least 3 years experience of successful execution of agriculture/rural development projects in remote/backward areas.  (b) Should have accounts audited for all programmes implemented during past three years

SI.No.	Component	Quantity for one ha	Amount (in Rs.)
1	Seed	20 Kg	2000.00
2	Trichoderma viride	2.5 Kg	350.00
3	Imidacloprid	5 ml/Kg	150.00
4	Pulses MN Mixture	5 Kg	425.00
5	Liquid biofertilizer (Rhizobium – pulses	500 + 500 ml	300.00
	+ Phosphobacteria)		
6	Foliar Spray of Nutrients	25 Kg	1300.00
7	Weedicide	Need based	1250.00
8	PPChemicals	Need based	1400.00
9	Gypsum	110 Kg/ha	325.00
10	Institutional charges (for one ha)		750.00
	Total		8250.00

Amount saved in one component may be used for other component.

### Guidelines

- ➤ Identification of beneficiaries will be done by the NGOs in consultation with the concerned block Assistant Director of Agriculture/Agriculture Officer/Assistant Agriculture Officer.
- > NGOs should ensure that all improved technologies are adopted in the Demonstrations.
- ➤ NGOs should make frequent visit to the Demonstration plots and provide feedback to the concerned block Assistant Director of Agriculture's/ Deputy Director of Agriculture(GOI schemes) on Fortnightly basis.

- Assistant Director of Agriculture/Agriculture Officer/Assistant Agriculture Officer should also visit the Demonstration field during critical GROWTH Phases (sowing, Vegetative, 50 % flowering, pod formation) and ensure that all the improved technologies are adopted in a proper manner by farmers and Supervised by the concerned NGOs.
- ➤ The total requirement of Inputs such as seed, T. Viride, MN mixture, Liquid biofertilzers should be informed to the concerned ADA/DDA (GOI schemes) and necessary indent should be placed in advance by ADA/ DDA (GOI)/ JDA.
- ➤ For the back ended subsidy (Imidacloprid, weedicides, PP chemicals, Gypsum),the guideline communicated for pure crop demonstrations under NFSM pulses should be adopted.
- ➤ The institutional charges should be released to the concerned NGOs only after verification of completion of demonstrations in clusters by the concerned ADA and DDA (GOI schemes).
- ➤ Proper documentation for all the demonstrations incorporating farmers details, date of sowing, adoption of technologies and impact of technologies with photos should be furnished by the concerned NGOs without fail to the Block ADAs.

Component – 12	:	Market support for Pulses
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This component will be implemented by Department of Agriculture Marketing and Agri Business.

SI. No.	Interventions	Rate of Assistance	Unit	Phy (Nos)	Fin ( in Lakhs)
1	Establishment of Mini Dhal Mills to registered FPOs	Rs.5.4 Lakhs/ FPO for the proposed budget of Rs.18.00 Lakh /unit	No.	10	54.000
2	Support for Branding and Marketing of Milled Pulses for FPOs(One time support)	Rs.5 lakh/FPO	No.	10	50.000
3	Support to registered FPOs to set up and equip Procurement Centers to grade and process Pulses	Rs.5 lakh/FPO	No.	10	50.000
		Total			154.000

**Name of the Districts Identified**: 10 districts viz., Thanjavur, Salem, Pudukottai, Villupuram, Thoothukudi, Nagapattinam, Tiruvannamalai, Dharmapuri, Krishnagiri & Vellore

## 1 Establishment of Mini Dhal Mill by registered Farmer Producer Organizations (FPOs)

- Mini Dhal Mill Unit will be established with a maximum subsidy of 30% or Rs.5.40 lakhs whichever is less.
- As per the specification, arrived after discussing with concerned Board of Directors (BOD), Chief Executive Officer (CEO) and Resource Institute (RI) of the respective FPO, necessary quotation shall be obtained from the manufacturer by the DDA (Agri Business).
- Purchase of Mini Dhal Mill will be based on the approval of District Purchase Committee headed by District Collector already constituted by Agriculture Department.
- After supply is effected by the approved company, the installation and working of the machine shall be checked and verified by the DDA (AB) and final report has to be submitted to Principal Secretary / Managing Director of Tamil Nadu Small Farmers Agri. Business Consortium (TNSFAC) by the concerned DDA (AB) along with proof of purchase, proceedings of District Purchase Committee etc.
- After receipt of the report, a final inspection will be made by the concerned District JDA & Any one of the JDA's at Head Quarter (AB). Based on the inspection reports, funds will be released from TNSFAC to the company through FPO.
- > The Sanctioned fund will be released to the beneficiary FPO as a back ended subsidy.
- ➤ The DDA (AB) of the respective district will monitor the utilization of established Mini Dhal Mill at periodical intervals.

#### 2. Supporting for branding and marketing of Pulses

This intervention will focus on technologies related to testing, packing, branding and labeling of various dhals.

SI.	Components	Unit	No	Total
No.		Cost	of	cost in
		(Rs)	units	Rupees
1.	Designing cost for brand (Trade mark) (only 4 Size i.e	3000	4	12000
	200gms / 500 gms / 1, 2 & 5 kgs )			
2.	Cylinder - (only 4 Size i.e 200gms/ 500 gms / 1, 2 & 5 kgs )	40000	4	160000
3.	Printing cover	Rs.0.60	4	240000
		for 200		
		kgs.		
4.	Fees for AGMARK grading license and processing charges	5000	1	5000
5.	Registration fee for trade mark	40000		40000
6.	ISO 22000 Certificate fee for food safety and security	50000		50000
7.	Single pouch heating machine	35000		35000
	Total			542000
	Subsidy			500000

- 1. Printed packaging covers laminated with details of the product, containers as well as bulk bins will be utilized for marketing.
- 2. The product will be promoted with a specific brand name with appropriate marketing strategies. Trade mark / Brand name will be designed with the help of suitable designer, selected based on the quotations in consultation with BOD, R.I and CEO.
- 3. All the finished product should have AGMARK grading duly stamped.
- 4. The ISO 22000 certificate for food safety and security should be obtained before marketing.
- 5. Automatic packing and sealing machine shall be purchased if required.
- 6. The detailed proposal including all the above components with relevant cost should be submitted by DDA (AB) to TNSFAC for approval.
- 7. After receiving approval of the proposal, it shall be implemented by FPO.
- 8. The implementation will be verified and authenticated by DDA (AB) and a final report has to submitted to TNSFAC.
- 9. Based on the report of DDA (AB), the concerned District JDA & any one of JDA from Head quarter (AB) will visit the FPO and inspect the Components. Based on the inspection report, the subsidy of Rs.5.00 lakhs will be released to the Concerned FPO

## 3. Support to registered FPOs to set up and equip Procurement Centers to grade and process Pulses

Procurement centre will serve as a collection point near to the production area and further facilitate loading it to the required destination.

Cost of construction of 10x5 meter building (RCC godown) for	Rs 10.00 lakhs
procurement centre and processing Centre	
Subsidy permitted	Rs. 5.00 lakhs/ FPO

- i. Suitable site shall be selected by DDA (AB) in consultation with BOD, R.I. and CEO of the FPO.
- ii. Procurement center to house the pulses processing unit, sorter / grader, drier, electronic weighing balance etc., shall be constructed.
- iii. Required equipments and machineries along with necessary supporting accessories shall be procured through District Purchase Committee.
- iv. The concerned DDA (AB) shall submit the final proposal to Principal Secretary / Managing Director, TNSFAC and get the approval prior to implementation
- v. DDA (AB) should send a final report on the implementation of this component. After the receipt of the report and field inspection by the concerned District JDA & JDA (AB), the subsidy of Rs.5.00 lakhs shall be released to the FPO.
- vi. DDA (AB) will monitor the utilization of the facilities at periodical intervals.
- vii. District JDA / DD(AB)of 10 identified districts will take steps for making awareness among pulses growers on the assistance given for market support and make use of facilities given.

## **GUIDELINES FOR THE IMPLEMENTATION OF NFSM - COARSE CEREALS**

S.No	Crop	Area of Operation - District
1	Sorghum	Coimbatore, Trichy, Tiruppur, Dindigul.
2	Cumbu	Trichy, Theni, Thoothukudi
3	Ragi	Salem, Dharmapuri, Krishnagiri
4	Maize	Coimbatore, Salem, Dharmapuri, Dindigul, Thoothukudi, Trichy,
		Perambalur and Tiruppur
5	Minor Millets	Dharmapuri, Krishnagiri, Coimbatore, Perambalur and Theni
6	Intercropping	Dharmapuri, Krishnagiri, Dindigul, Thoothukudi
	(Millets+Pulses)	

## 1. (i) Demonstration on improved packages in Coarse Cereals

Rate of assistance

Rs. 4000/- per demo per Ha

## (Sorghum, Cumbu, Ragi & Minor Millets)

SI.	Input	Quantity	Source of	Amount
No.			Supply	(Rs.)/ha
1	Seed	10-15 Kg/ha		500.00
2	Pseudomonas	10gm/Kg of seeds		50.00
3	Millet MN mixture	12.5 kg/ha		950.00
4	Liquid bio fertilizer		Department	
	Azospyrillum	0.5 lit / ha		300.00
	Phosphobacteria	0.5 lit / ha		
5	Contingencies (field day and			200.00
	documentation)			
6	Sowing with Seed Drill for Sorghum,		Back ended	2000.00
	Ragi (rainfed) / Promotion of line		subsidy	
	sowing for Cumbu, Minor Millets/Line			
	transplantation for Ragi (irrigated)			
	Total			4000.00

## 1. ii) Demonstration on Improved Packages (Maize)

SI.No.	Input	Quantity	Source of Supply	Amount (Rs.)/ha
1	Millet MN mixture	12.5 kg/ha		950.00
2	Liquid bio fertilizer			300.00
a)	Azospyrillum	0.5 lit / ha	Department	
b)	Phosphobacteria	0.5 lit/ha		
3	Contingencies (field day and documentation)			200.00
4	Maize Seeds	15 Kg/Ha	Department / Back ended subsidy	1500.00
5	Ridges and Furrows sowing		Back ended subsidy	1050.00
	Total			4000.00

## 2. Demonstration on Intercropping with Pulses

Rate of assistance Rs. 5000/- per demo per Ha

# 2.i) Demonstration on Intercropping Millets( Ragi & Minor Millets) with Pulses (lab-lab)

SI.No.	Input	Quantity	Source of Supply	Amount (Rs.)/ha
1	Millet Seed ( Ragi & Minor Millets)	10-15		500.00
		Kg/ha		
2	Pseudomonas	10 gm / Kg		50.00
		of seeds		
3	Millet MN mixture	12.5 kg/ha	Department	950.00
4	Liquid bio fertilizer			
a)	Azospyrillum	0.5 lit / ha		300.00
b)	Phosphobacteria	0.5 lit/ha		
5	Pulses seed(Lab-lab)	8-10 Kg/ha	Back ended subsidy	1000.00
6	Contingencies (field day and		Department	200.00
	documentation)			
7	Sowing with Seed Drill for Ragi		Back ended subsidy	2000.00
	(Rainfed) / Promotion of line			
	sowing for Minor Millets/Line			
	transplantation for Ragi (irrigated )			E000.00
	Total			5000.00

### ii). Demonstration on Intercropping Maize with Pulses

	Input	Quantity	Source of Supply	Amount (Rs.)/ha
1	Millet MN mixture	12.5 kg/ha		950.00
2	Liquid bio fertilizer			
a)	Azospyrillum	0.5 lit / ha	Department	300.00
b)	Phosphobacteria	0.5 lit/ha		
3	Contingencies(field day &			200.00
	Documentation)			
4	Maize Seeds	15 Kg/Ha	Department/ Back	1500.00
5	Pulses seed(black gram)	8-10 Kg / Ha	ended subsidy	1000.00
6	Ridges and Furrows sowing		Back ended	1050.00
	-		subsidy	
	Total			5000.00

- a) All inputs specified for organizing demonstration are mandatory but saving in one input may be utilized for other input or physical number of demonstration may be increased without exceeding the cost per demonstration.
- b) Maize seed notified less than 10 years varieties available may be distributed through department or back ended subsidy may be given on receipt of bill.

## 3. Distribution subsidy for HYV and Hybrid Millet Seeds:

Rate of : Varieties Rs. 15 / Kg or 50% whichever is less

assistance Hybrid seeds Rs. 50/- per Kg.

Varieties : All National / TNAU Millet varieties / Hybrids which are less than

10 years old are eligible.

Source of inputs : Department

a. ADA should distribute the seeds of less than 10 years varieties through AEC with subsidy of @ Rs 15/- per Kg for HYV and Rs. 50/-per Kg of hybrid seeds to the farmers in NFSM Coarse Cereals districts.

## **National Food Security Mission – Commercial Crops**

### 1. Cotton

## A. Components implemented by Department of Agriculture

- i. Front Line Demonstration (FLD) on Integrated Crop Management Practices
  - Rate of Assistance Rs. 7000/- per ha
  - **Districts covered:** Perambalur and Virudhunagar

SI. No.	Interventions	Allocation Rs./Ha.	Source of input	
1	Liquid bio-fertilizer –Azosprillum (Others) & Phosphobacteria -625 ml/Ha each	350		
2	Trichoderma virdie for Seed treatment (4g/kg) and soil application 2.5 Kg/Ha	350	Department	
3.	Cotton Micro Nutrient Mixture- 12.5 Kg/Ha	1000		
4.	Pendimethalin -pre-emergence herbicide 3.3 lit/Ha	1500		
	PP Chemicals – need based restricted to Rs.3600/- per ha	3600		
5.	Azadirachtin 2.5 lit / Ha. (0.03 % EC)		Back ended	
5.	Imidacloprid 250ml/ Ha			
	Corogen 120 ml/Ha			
6.	Contingencies (POL, Field day, documentation etc.,)	200		
	Total cost norm for One ha.	7000		

## ii. Trials on High Density Planting System( HDPS )

- Rate of Assistance :Rs. 9000 /- per ha
- Implementing districts: Perambalur and Virudhunagar
- Variety: Suraj seed indent shall be placed with the SIMA, CRDA Coimbatore by the respective districts.

SI. No	Inputs involved	Cost norm/Ha	Source of input
1	Suraj Seed, 12.5 Kg/Ha	2000	SIMA, CRDA, Coimbatore
2	Liquid biofertilizer -Azospirillum (others) & Phosphobacteria -625 ml/Ha each	350	_
3	Trichoderma viride for Seed treatment (4g/kg) and soil application 2.5 Kg/Ha	350	Department
4	Cotton Micro Nutrient Mixture- 12.5 Kg/Ha	1000	
5	Pendimethalin -pre-emergence herbicide 3.3 lit/Ha.	1500	
6	PP Chemicals -Rs. 10000/-Ha restricted to Rs. 2800/- per Ha ( Need Based)	2800	Back ended
7	Growth retardant -Mepiquat Chloride 5% w/w @ 625 ml/Ha	800	
8.	Contingencies, POL, Field day, documentation etc.,	200	
	Total cost norm for One ha.	9000	

- While organizing FLDs and trails on HDPS, JDA Perambalur and Virudhunagar shall coordinate with Cotton Research Station, Vepanthattai and Cotton Research Station, Srivilliputhur respectively.
- Savings in any of the intervention may be diverted to other intervention not exceeding the total cost norm per ha.
- Implementing districts should send the performance of the FLDs and trials on HDPS after the completion of the programme.

## B. Components implemented by <u>Tamil Nadu Agricultural University</u>

## 1. NFSM - Cotton

- Frontline demonstration on newly released Co-14 Extra long staple cotton variety shall be organized in 20 Ha by Department of Cotton, TNAU.
- Frontline demonstration on promotion and seed production of Desi cotton culture TKA 9102/3 shall be organized in 10 Ha at ARS, Kovilpatti.
- Trials on High Density Planting System to popularize compact culture TCH1819 shall be organized in 10 Ha at CRS, Srivilliputtur,
- Source of input: TNAU
- TNAU will arrange for field visit along with cotton growers to the demonstration field during the critical growth stages and send the performance report to ADAs.

S. No.	Inputs involved	FLD on ELS cotton	Desi Cotton production	Trials on HDPS
1	Seed material- 10 kg for FLD on ELS/Desi cotton seed production & 18.75kg/ha for HDPS	1400	1400	2625
2	Weedicide – Pendimethalin	1500	1500	1500
3	Pseudomonas (Seed treatment + Soil application)	300	300	300
4	Cotton plus – 6.25 kg/ha	1250	0	1250
5	Plant protection chemicals for sucking pests, boll worm and diseases –Need based	2550	3800	2325
6	Contingencies – Stationary items, POL, TA/DA, Refreshment charges for conducting Field day, Documentation etc.,	1000	1000	1000
	Total (Rs.)	8000	8000	9000

### 2. NFSM - Sugarcane

- Implementing agency: Sugarcane Research Station (SRS), Cuddalore, TNAU
- **Programme period:** December 2016 to November 2017

## a. Demonstrations on intercropping in Sugarcane

- Beneficiary will be identified by SRS, Cuddalore in coordination with Block Assistant Director of Agriculture/Agricultural Officer/Assistant Agricultural Officer
- > Assistant Director of Agriculture of the block concerned shall also visit the demonstration field during the critical growth stages and send the performance report
- > Cafeteria of interventions to be adhered are:

S. No	Interventions	Cost norm Rs. Ha	Source of input
1.	Pulses seed (Black gram/Green gram) 10 Kg /Ha @ Rs. 100/- Kg for intercrop.	1000	TNAU/Private (Back-ended)
2	DAP Foliar Spray@ 12.5 Kg/Ha	650	Private (Back- ended)
3	Sett treatment (500 ml each) and soil application (500 ml each) of Liquid Bio fertilizer -Azosprillum & Phosphobacteria	560	TNAU
4	Sugarcane MN Mixture 50 Kg/Ha @ Rs. 37.70/- Kg	1900	
5	Trash mulching	3000	Back-ended
6	Pre-emergence weedicide	650	
7	Contingency (POL, field day, documentation etc.,)	240	
	Total cost norm/ Ha. Demo	8000	

### b. Breeder seed production:

- Production of breeder seeds of varieties not older than 15 years should be taken up.
- Assistance of Rs.40,000 /- per ha will be provided with the following cost norms for each activity

S.No	Activities (Cost of cultivation)	Amount (Rs)
1.	Seed material (setts)	12000
2.	Land preparation	7500
3.	Seed treatment chemicals	500
4.	Fertilizers	11500
5.	Sugarcane Micronutrients Mixture	2000
6.	Herbicide	2000
7.	Plant protection chemicals	1500
8.	Intercultural operations	3000
	Total cost/ha	40,000

## c. Strengthening of Tissue Culture Lab for production of tissue cultured plantlets of Sugarcane at Sugarcane Research Station, Cuddalore

Budget will be allocated for the following items:

S. No.	Particulars	Quantity	Approximate cost. Rs. In lakhs
1.	Renovation of existing lab – insulation of culture room walls		5.00
2.	Laminar air flow	1	1.00
3.	Hardening chamber	1	5.00
4.	pH/ mV-Redox-ORP/conductivity/Total dissolved solids/temperature for pH calibration	1	0.85
5	Autoclave	1	1.00
6.	Refrigerator with stabilizer	2	0.50
7.	Air conditioners	2	0.80
8.	Furniture	As per need	7.00
9.	Distillation Unit		0.55
10.	Contractual skilled and unskilled labour charges		2.40
11.	Operational cost (Chemicals, plastic/glass wares, planting material & their nursing, Polybags, nursery tray, TA/hired vehicles, two iron display board, documentation, Stationary, report preparation etc.		6.00
	Total		30.10

 The chemicals and glass wares items shall be procured under the rate contract approval of TNAU, Coimbatore for the year 2016-17 and the remaining items shall be purchased through calling for Quotations as per TNAU norms and procedures.

## d. State Level Training

- Two days training for farmers and cane assistants working in sugar mills shall be organized with 20 participants from Cuddalore and nearby Sugarcane growing districts.
- The assistance of Rs. 40000/- per training will be provided for the following items as per the NFSM Commercial Crop guidelines

Particulars	Amount
Honorarium to Resource person @ Rs. 500/- per lecture for 10 lectures	Rs. 5000
2. Refreshment for inaugural session for 50 persons @Rs.50/- per head (20 Participants +5 Resource person for 2 days)	Rs.2500
3. Boarding and lodging for trainees @Rs.500/- per head per day	Rs.20000
4. Training Kit including publication @Rs.400/- per trainee	Rs. 8000
<ol> <li>Contingencies including audio visual arrangements, stationary, field visit etc</li> </ol>	Rs. 4500
Total	Rs. 40000

- while organizing the demonstration by TNAU, Assistant Director of Agriculture of the block concerned shall also visit the demonstration field during the critical growth phases and send a performance report after the completion of the programme
- > Savings in any of the intervention may be diverted to other intervention not exceeding the total cost norm per ha.
- Monthly Progress Report, Performance Report of the FLDs /Demonstrations, outcome of the Breeder Seed Production and Utilization Certificate shall be furnished by TNAU after completion of the projects

Gagandeep Singh Bedi Agricultural Production Commissioner and Secretary to Government

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Section Office