

PROCESS NOTE AND GUIDELINES
ON
COMMUNITY MANAGED SEED SYSTEM (CMSS)
UNDER APDMP



CONTENTS

| | |
|---|----|
| 1. INTRODUCTION ON COMMUNITY MANAGED SEED SYSTEM (CMSS) UNDER APDMP | 1 |
| 1.1. Objectives of the Program | 1 |
| 1.2. Institutional Setup | 2 |
| 1.2.1 Preparation of Cluster Seed Indents | 3 |
| 1.2.2 Lead FA level Seed Plans and Integration with District Plans | 3 |
| 1.2.3 Seed Production Plan for the Cluster | 3 |
| 1.2.3 Seed Farmers' Registration | 4 |
| 1.2.4 Integration with State Plans | 4 |
| 1.2.5 Firm-up Plan for Seed Sales & Quality Seed in Export Grain Market..... | 4 |
| 1.2.6 Season-long Training on Seed Production | 5 |
| 1.2.7 Seed Certification | 5 |
| 1.2.8 Develop Pool of Roughing Experts | 6 |
| 1.2.9 Mid-season Report | 6 |
| 1.2.10 AP State Seed Corporation Ltd (APSSCL) | 7 |
| 1.2.11 Procurement, Processing and Storage | 7 |
| 1.2.12 Modalities for Setup of Infrastructure at MVKs are | 8 |
| 1.2.14 Stock Verification Certificate and Uploading the Stock Details | 9 |
| 1.3.1 Seed Producing Farmer:..... | 10 |
| 1.3.2 Mana Vittana Kendram: Managed by the Farmer Producer Organisation (FPO) | 10 |
| 1.3.3 Facilitating Agency | 11 |
| 1.3.4 Lead Facilitating Agency | 12 |
| 1.3.5 Lead Technical Agency (LTA) | 13 |
| 1.3.6 Department of Agriculture | 13 |
| 1.3.7 AP State Seed Certification Agency | 14 |

| | | |
|-------|---|----|
| 1.3.8 | ANGR Agriculture University | 14 |
| 2. | PROCESS NOTE FOR MID-SEASON REPORT | 15 |
| 2.1. | Information to be collected in mid-season report | 15 |
| 3. | INFORMATION TO BE COLLECTED IN MID-SEASON REPORT | 16 |
| 3.1. | Mid-season report | 16 |
| 3.2. | Identification potential seed purchasers with assured irrigation and seed sowing window | 16 |
| 3.3. | Assessing the seed demand and supply | 16 |
| 4. | PROCESS STEPS TO GET SEED LICENCE FOR MVKs | 17 |
| 4.1. | Process Steps | 17 |
| 5. | PROCESS STEPS TO GET PROCESSING UNIT LICENCE FOR MVK | 19 |
| 5.1. | Process Steps | 19 |
| 6. | PRICE FIXATION UNDER CMSS | 20 |
| 6.1. | Price Fixation Committee | 20 |
| 6.2 | Indicative check list for cost of cultivation exercise: (for different oil types) | 21 |
| 6.3 | Proposed prices by district price fixation committee format: | 21 |
| 7. | INCIDENTAL CHARGES FOR CMSS UNDER APDMP | 22 |
| 7.1 | Incidental Charges Break-up | 22 |
| 8. | A BRIEF NOTE ON PROCEDURES TO BE FOLLOWED IN CMSS TO INITIATE PROCESSING, PACKING, STACKING AND DRAWING SAMPLES, TAGGING FOR SEED PROCUREMENT | 23 |
| 8.1 | Initiation of Processing of Harvest | 23 |
| 8.2 | Storage of Seed in Godowns / Stock points | 24 |
| 8.3 | Infrastructure and Equipments Needed for Processing | 24 |
| 9. | ANNEXURES | 28 |
| 9.1 | Annexures – 1 | 28 |
| 9.2 | Annexures – 2 | 28 |

1. INTRODUCTION ON COMMUNITY MANAGED SEED SYSTEM (CMSS) UNDER APDMP

The CMSS has evolved in Anantapuramu and Chittoor districts as a result of the collaboration between Department of Agriculture (DoAgri), State Seed Development Corporation, State Seed Certification Agency and Farmer Producer Organisations (FPOs) (called Mana Vittana Kendralu), facilitated by a Facilitating Agency(FA) under the overall coordination of a Lead Technical Agency(LTA). The Seed Village Program (SVP), Breeder Seed Production and seed subsidies are integrated into a localised system of seed production and distribution, mainly for varieties of self-pollinated and often cross pollinated crops.

APDMP will institutionalise CMSS in all the Gram Panchayats (GPs) of the program. The Standard Operating Protocols of CMSS were issued in a Government Order (GO), mainly targeting groundnut crop. For other crops, necessary modifications will be brought in facilitated by the SPMU and the LTA.

BOUNDARIES OF CMSS

CMSS managed by FPOs will initially deal with self-pollinated crop seed production and move to cross pollinated crops, where there are no private players

It works with informal & indiscreet seed systems to enable them to formalise with improved technical capacities; localise seed markets; conserve local land races / indigenous crops

1.1. Objectives of the Program

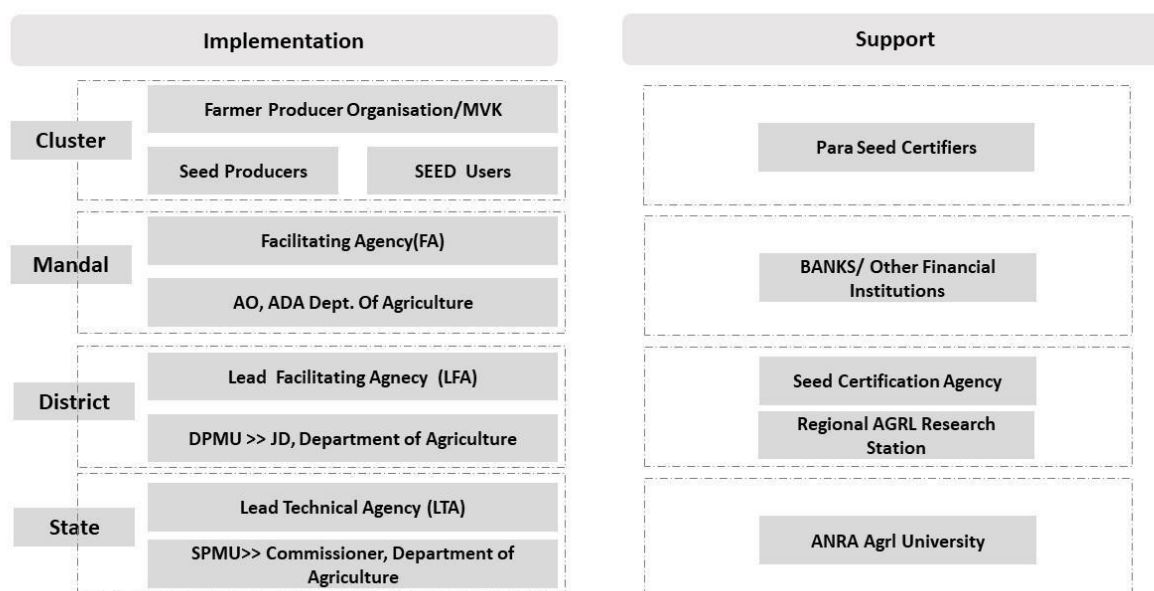
The program intends to establish a decentralised seed system managed by the FPOs that will provide quality seeds of locally appropriate diverse varieties, well in time, for farmers to make the best use of early rainfall/ sowing window.

The CMSS will include seeds of all relevant crops that help in diversification of crop systems and management of climate related contingencies. It will set up robust processes for identification, purification, multiplication, conservation and usage of locally adapted seed material.

While the private sector seed companies deal with hybrids and high value seeds, much of the seeds requirement of diverse crops is met by the informal sector. The ratio between requirements met by private seed companies to informal sector could be 1:3 - about 75% of the seed supply is in the informal/indiscreet agencies, including farmers. The key improvements needed in seed sector restructuring are two folds:

1. Strengthen the seed production and distribution/Sales by FPOs & integration to the state seed supply
2. Improve the quality of 75% of the seed in the informal market

Stakeholders in CMSS – Schematic Diagram



Situation Analysis: The starting point is to analyse the existing crop systems, followed by types of crops and varieties, seasons, supply chain, and costs.

1.2. Institutional Setup

- a. The FPO, recognised as Mana Vittana Kendram (Farmers Seed Centre) is the nodal institution for CMSS, at the cluster level. A MoU is signed by the FPO/MVK with the Dept of Agriculture, APSSDCL, LFA/FA and the seed farmers. CMSS may be anchored in any of the GPs in the cluster. The communication and transactions are maintained at CLiCs. Vittana Committees will be formed at the village level with seed producers, seed purchasers and village elders. This platform will help in planning, procurement, distribution at village level; they can meet trice in a season (Pre-season>> to identify the seed producing farmers, Mid-season>> to participate in crop cutting experiment & mid-season report, At the time of harvest & procurement)
- b. Mana Vittana Kendram (MVK) will work on four components i.e. Seed Indents, Production, Conservation, Use &Marketing.
- c. The cluster FPO institutes a CMSS sub-committee constituting five of its members, two representatives from member-seed producers, one representative of the GP and two representatives from the local Village Organisation (federation of women SHGs at village level).
- d. Should have Seed licence and Processing Unit licence

1.2.1 Preparation of Cluster Seed Indents

Based on the output of the Crop System Analysis, FA facilitates a participatory exercise to assess the seed availability for the desired crops identified in the exercise. Seed demand/indents of suitable crops are obtained from the GPs in the cluster. These include local cultivars widely in use but not notified. The previous year's seed distribution by the DoAgri will be taken into account to assess the demand.

1.2.2 Lead FA level Seed Plans and Integration with District Plans

An aggregation of village seed plans will form the basis for cluster level annual CMSS seed plan to be finalized by the Mandal Agriculture Officer (MAO) & Joint Director (JD) Agriculture with support from the FA and LFA. LFAs will aggregate the seed plans of all the Clusters (from FAs) and together with DPMU arrive at the district level plans.

1.2.3 Seed Production Plan for the Cluster

A plan is prepared for seed production within the cluster - multiplication of foundation seed into certified seed, participatory varietal trials and purification of local cultivars are three parts of the plan.

MVKs will take up the seed production of two types of seeds:

1. Improved varieties/High Yielding Varieties (HYVs): MVKs source the breeder seed/ foundation seed from Agriculture Research Stations or authorized agencies, based on the decision of the DoAgri and take up seed multiplication. They then supply the seed to DoAgri.
2. Purification of local land races/cultivars: MVKs will map local land races available in the cluster and purchase the seed from farmers.
 - Sale of local land races: Purchased seed is cleaned to maintain the physical purity and the same is sold to farmers on cost basis for grain production
 - Purification, characterization and multiplication: DoAgri & LTA will open up the partnership with NBPGR and ANGRAU. A series of activities - collection of samples, taking up trials of collected samples, seed characterization, purification and multiplication, purchase of multiplied seed by MVKs, processing and packing on cost basis and making the seed available to farmers.

1.2.3 Seed Farmers' Registration

- A. Identify the farmers for seed production/business based on the following criteria and finalise the list of seed producers for specific crops.
- B. Criteria to select farmers for seed production (MVK will collect necessary support documents like copy of pattadar-pass book, electricity bills):
 - a. Assured irrigation source
 - b. Not saline/alkaline soils
 - c. Willing to attend trainings on seed production and meetings whenever required
 - d. Ready to do roughing
 - e. Willing to send samples to APSSCA.
- C. Seed farmers willing to produce seed and trade it have to register with MVK and enter into an agreement with MVK

1.2.4 Integration with State Plans

SPMU with support from LTA aggregates the seed plans at the project level and discuss with DoAgri on sourcing the breeders' /foundation seed from ANGRAU, allocation of budgets under SVP/NOOM/NFSM etc. and for inclusion in its state plans. Such allocations will be especially sought for to maintain buffer seeds.

1.2.5 Firm-up Plan for Seed Sales & Quality Seed in Export Grain Market

MVK will enter into an agreement with seed producers and make quality seed available to farmers who want to trade in the export grain market.

Once these allocations are made, the program will follow the ongoing CMSS guidelines for production, procurement, processing and distribution of seed under the seed subsidy program. The seeds (of self-pollinated/ often self-pollinated crop) in demand, but for which subsidy is not available will also be produced but sold at normal prices (without subsidy). CLiC centres will obtain necessary seed licenses and sell the seeds to their members and others. CLiCs may also source seeds from research stations or private companies for sale locally.

1.2.6 Season-long Training on Seed Production

The capacities of the farmers in seed production will be built through season-long training following the Farmer Field School (FFS) approach. These trainings will be organised by LFA in one of the clusters of the FA, with seed farmers and FA participating in the training.

1.2.7 Seed Certification

It is a pre-requisite to ensure good quality seed. Mandal Agriculture Officer is responsible for ensuring the seed certification processes is completed in time. Seed certification will be done by the APSSCA against payment of certification fee by the seed farmers as per the norms. The MVK will collect certification fee from the seed farmers and make payment to the APSSCA. To ensure more participation and responsibility of farmers to produce good seed, the following steps were introduced:

- a) On-site seed quality assessment including germination tests and participatory seed quality assessment.

Under this process, the MVK responsible will collect seed samples, label them appropriately and conduct germination tests and assess seed quality. The concerned Agriculture Officer will also be part of such assessment.

- b) Para-seed certifiers (Vittana Mitrulu) to strengthen the AP State Seed Certification Agency.

A course to develop para-seed certifiers ('Vittana Mitra' (VM) was introduced in the CMSS program. Krishi Viganan Kendra (KVK) will organise the training in two modules - basic and advanced. In the basic training VMs will learn about seed, science behind seed setting and difference between seed and grain. Advanced module is crop specific with topics on class of the seed, seed production, certification process, quality parameters, processing, packing and tagging etc.

One VM will be tied to each MVK. Each VM will provide services to approximately 50-80 acres of seed production, depending on seed multiplication ratio. They will liaison with the District Certification Officer (DCO) and follow up on the necessary protocols of field visits, to ensure roughing under the supervision of the district APSSCA. The VM is also responsible to ensure the seed samples reach the APSSCA & for collecting the tags from them. They work under the direction and

supervision of the DCO in technical aspects. The FA and MVK will identify the persons for VM training. The VM is responsible for:

1. Ensuring isolation distance
2. Roughing of off-types
3. Ensuring separate threshing of the produce
4. Collection of samples and submission to APSSCA
5. Collection of tags and Form 2 and submitting the same to MVK

The VM will be paid for their services and these will be built into the seed sale price. Ex: Rs. 40 per kg of groundnut seed/bulk seed for which seed multiplication ratio is less; need to evolve this for crops with seed multiplication is more. The payment will be made by MVK against the authorisation of the APSSCA district officer.

1.2.8 Develop Pool of Roughing Experts

Identify the labourers who are into weeding operations and knowledgeable about roughs in different crops. They may be trained further on identification of roughs in all crops, the time when roughs can be removed from the fields etc. These trained labourers can be engaged in weeding operations in seed production fields. Module will be developed to build these capacities.

1.2.9 Mid-season Report

The Mid-Season Report on CMSS consists of farmer wise & MVK wise expected yield and tentative time of harvest. This will be prepared along with Multi-Purpose Extension Officer (MPEO)/ Agriculture Extension Officer (AEOs) after conducting the crop cutting experiments.

Aggregation of Mid-season report will be done at mandal level by MAO and LFA will share the Mid-season report with Joint Director Agriculture (JDA) & DM, APSSDCL. Mid-season report would be the milestone against which part-payment of incidental charges (50%) on the estimated quantity of seed available for distribution will be paid to the MVK, FA and LTA and working capital advance (50%) to MVK.

1.2.10 AP State Seed Corporation Ltd (APSSCL)

It is a nodal agency for seed production and supply to DoAgri. As per Standard Operating Procedure (SOP), APSSDCL will give the working capital advance which include the incidental charges to MVKs. MVK, APSSDCL, FA and LFA will enter into an agreement for working capital advance to procure the seed from seed farmers. FA will take responsibility of establishing the systems & financial management etc. LFA will facilitate the MoU at the District level.

Ex: Ground Nut seed quality parameters

| | | |
|---|---|------|
| 1. Moisture | : | <= 8 |
| 2. Germination % | : | 75% |
| 3. Foreign material (small pods, stones, waste material etc.) | : | <4% |

1.2.11 Procurement, Processing and Storage

A major departure in CMSS is decentralized seed processing/ cleaning and packing, replacing centralized seed processing. Responsibility of harvesting, processing and package lies with MVK. At MVK there will be two committees: (i) Quality assessment committee, (ii) Procurement committee

- **Notifying the Godowns/ stock points for certain time:** MVKs should identify the stock points/ godowns within cluster it includes private spaces, Community halls, Govt. schools/ Anganwadi centers. MAO, FA, MVK representatives will visit and finalise the godowns from identified ones. Details like these are required, the space is on lease / free, owner name, door number, room measurements (LxWxL), storage capacity, route map, floor and roof, windows and doors etc. LFA has to compile all these and submit to DPMU. DPMU will submit it to JDA to get notification
- **Quality Assessment Committee:** To protect the purchaser's interest, MVK constitutes a quality assessment committee with 3-4 selected seed purchasers within the cluster. Purchase committee will purchase the seed from seed producers recommended by the quality assessment committee. Quality parameters of each crop are different.

Members to the quality assessment committee will be selected based on 1) Knowledge about quality parameters, 2) Ability to spare time to go to seed producers' fields, 3) Should be able to give a frank opinion on quality of seeds

- **Procurement Committee:** It should have a minimum of 6 members - two members from MVK/FPO and 4 members from among the seed purchasers will be part of this

committee. The committee will be assisted by a VM. The procurement committee goes about its responsibilities by following the steps below:

1. Seed Farmer notifies the harvesting date to the MVK.
2. The seed production plots must be harvested separately. Seed moisture levels maintained at required level.
3. Seed is brought to the processing facility (run by the MVK in the cluster) for second level cleaning, after primary cleaning done by farmer.
4. Each MVK will have a set of infrastructure (Processing unit, weighing machines, moisture meter, balance for shelling % calculation, sieves, tarpaulins, storage bins and mobiles) supported by DoAgri. The FAs will ensure the requirements and protocols are met.
5. Seed Storage Bags with label and CMSS logo as specified under the seed laws have to be procured and prepared by the FA along with MVK and standards as applicable have to be followed.
6. Each bag will be tagged and stored in authorised local storage godown / stock points.

1.2.12 Modalities for Setup of Infrastructure at MVKs are

- | | |
|---|---|
| <ol style="list-style-type: none"> a. 10% of the total investment should be maintained in the respective MVKs bank accounts, for the maintenance of infrastructure. b. MVKs should show adequate space for safe-keep of the machines c. MVK must enter into an agreement with two persons to whom the infrastructure safe-keep and maintenance functions are vested with. d. Resolution on hiring charges in the MVK, if these machines go out on rental basis. Maintain a separate ledger / books of accounts for this. e. Must maintain movement register f. Hire charge collection register g. Stock register with proper documentation. h. Send a photograph of each machine/ implement purchased along with beneficiary to DoAgri. | <p style="text-align: center;">SET OF INFRASTRUCTURE</p> <ol style="list-style-type: none"> 1. Seed processing unit 2. E- weighing machines 3. Balance to measure shelling % 4. Moisture meter 5. Stitching machine 6. Banner with MVK name, Village, mandal & MAO Ph no: 7. Sieves, gunny bags, seed storage bins for low volume seeds |
|---|---|

The infrastructure will be taken back by DoAgri in case they are not in use as per the defined purpose for two consecutive seasons, or if the MVK fails to participate in the CMSS program.

1.2.14 Stock Verification Certificate and Uploading the Stock Details

Once stock is procured against the working capital advance, stock will be verified by MPEO/AEO/MAO at stock points & a stock verification certificate given. Once seed procurement process is completed, MVK wise stock details will be uploaded by MAO.

- **Price Fixation:** JDA convenes the price fixation committee meeting at the district which consists of DM, APSDDCL, OILFED, MARKFED, AD, Marketing, one representatives from LFA and LTA and two from MVK. This committee will discuss the cost of cultivation, yield and market prices prevailing in nearby major markets and arrives at a purchase price. This will be sent to Commissioner, Agriculture as recommendation to issue price memo, which includes purchase price and sale price (purchase price + incidental charges).

Price of seed (foundation seed or certified seed) will be announced/notified by the Commissioner, Department at the time of harvest. The price will have a mark up to cover the costs.

- **Seed Distribution, Claiming subsidy and Incidental charges:** MAO calls for a meeting with FAs and MVKs along with MPEOs & AEOs to prepare a plan for seed distribution. After announcement of the seed distribution by District administration, distribution will be done accordingly by using the Aadhaar enabled Bio-metric system.

An MPEO is attached to each MVK and all the transaction are done in the presence of MPEOs. Farmers pay the non-subsidy as mentioned in the price memo to MVK and take the seed. MVKs deposit the amount in the APSSDCL bank account, after deducting the incidental charges. MVK & FA submit the UCs to JDA; JDA in turn submits the UCs to Commissioner, Agriculture and on this basis APSSDCL claims subsidy later. A set of books is maintained at MVKs with the support of FAs.

1.3. Main Partners of the CMSS Program & their Responsibilities

1.3.1 Seed Producing Farmer:

- Pay for the Breeder/Foundation/Certified seeds: Seed producers pay the full cost, the price announced by Department of Agriculture.
- Pay for seed certification through the FA.
- Adhere to the seed production protocols, particularly following the isolation distance and roughing; support Vittana Mitra in ensuring certification protocols.
- Attend all mandatory trainings.
- Harvest crop, dry the grain to the seed standards and process it at the common facility provided by the MVK, under its supervision.
- Pack processed seed in the CMSS stamped bags.
- Show the crop and its harvest to the farmers interested to purchase the seed.
- Maintain a record of practices and dates.
- Records/ Reports to be Maintained: nil

1.3.2 Mana Vittana Kendram: Managed by the Farmer Producer Organisation (FPO)

The program is primarily managed by a FPO active in a cluster of villages. It provides a platform for seed producers and users, and hosts the program. Through proper consultations the JDA will designate a functional FPO with capacity to serve the program, as the anchor of the MVK. An acceptance from the FPO to anchor the MVK and to take services from the FA will be obtained. It will maintain necessary infrastructure required for the CMSS.

Responsibilities of MVK (with Support from the FA):

- MVK will be the node for seed related programs of the Department of Agriculture, to ensure seed security in the cluster of GPs; acting independently in the interest of farmers.
- Preparing indent for seeds and other inputs for the cluster of GPs, and support Department of Agriculture in preparing Annual Seed Indents.
- Take up necessary action to source and supply seed according to the process laid out earlier. Organise seed producer and seed purchasers' interaction and field visits.
- Identify seed farmers and seed purchasers and ensure their training as necessary.
- Build and maintain assets related to seed processing infrastructure.

- Arrange for necessary facilities and infrastructure for weighing, seed processing, packaging etc.
- Support seed farmers in completing the formalities related to seed certification in time and make necessary arrangements to preserve the 'tags'.
- Link the seed certifiers to the farmers and ensure smooth flow of the logistics and timely events.
- Mobilise farmers for training.
- Endorse the work of Vittana Mitra in seed certification.
- Enable linkages and liaison with Department of Agriculture, Seed Certification Agency and others.
- Provide active support in crop diversification in the cluster by taking up seed production/ supply of diverse crops and varieties; and, ensure that they are included into the Annual Seed Plans.
- Records to be Maintained:
 - Standard Data Registers:
 - Register of seed farmers with an identification number and personal details (Aadhar number, phone number, Bank account details, etc.)
 - Land use and crop pattern data
 - Seasonal Data Records: (maintained for every season) ○ Annual Seed Plan and indent for the MVK
 - Seed production register (including certification details).
 - Stock register, purchase register
 - Assets register
 - Books of accounts
 - Seasonal and annual Audit of finances.

1.3.3 Facilitating Agency

The FPO is supported by a FA, an NGO actively working in the area with capacity to organise farmers, capacitate them to establish and manage their seed systems and provide linkages with Department of Agriculture, Agriculture Research and other institutions. The CMSS program is primarily implemented by the FPO with support of the Facilitating Agency, while all other actors support it.

Responsibilities of FA:

- Form, support and strengthen the MVKs and support them in implementing the program.
- Organise trainings to the seed farmers and extend need based technical support during the crop season, as per the calendar.

- Liaison with LFA, Department of Agriculture, APSSCA, ANGRAU in fulfilling all formal requirements of sourcing seed, submission of formats, data, financial statements etc. and organise the logistics for visits of external people.
- Identification of Vittana Mitra along with MVK and facilitate their training and incubation with APSSCA.
- Raise invoice on the seed transactions with Department of Agriculture and follow up on the payment of incidental charges to MVK.
- Help MVK in setting up financial systems and maintenance of books of accounts.
- Maintain the related databases
- Liaise with the Lead Technical Agency and provide necessary data /reports as per the program requirements.
- Records to be Maintained:
 - Computerised database of the farmers list with details required for the program.
 - Season-wise reports on distribution, payments, and other aspects of program implementation

1.3.4 Lead Facilitating Agency

It coordinates with FAs, ADAs, LTA and DPMU. It ensures the FAs roll out the program as per the plan. It does the quality checks, checks books maintained and trouble shoot.

- Responsibilities of Lead Facilitating Agency:
 - Together with the FA and the Department of Agriculture – generate indent for Breeder/Foundation /Certified seed requirement.
 - Work with Department of Agriculture at District in seed procurement and distribution; Participate in meeting to fix price.
 - Bring up issues in multi-stakeholders program coordination to DPMU and JDA for smooth implementation of the program.
 - Compiles the data and submits the required documents to DPMU. o Undertake necessary field visits for the above purposes.
 - Facilitate sharing of experiences across the MVKs and encourage innovation.
 - Facilitate resolution of conflicts.
 - Ensure the CB plan rollout
 - Liaison with ARSs and KVKs
 - Records/ Reports to be Maintained: o Program data bases
 - List of FAs and their performance indicators

1.3.5 Lead Technical Agency (LTA)

WASSAN is assigned the role of an LTA with principal responsibility to design the program, facilitate collaboration at various levels, capacity building, monitoring and evaluation (M&E) and documentation support and policy development. Lead Technical Agency supports the program at district and state levels.

- Responsibilities of Lead Technical Agency:
 - Triggers the process of indenting for Breeder/ Foundation / Certified seed requirement
 - Support the SPMU in working out the modalities of seed procurement and distribution; liaison with the state Agriculture Department for price fixation
 - Liaison with ANGRAU for supply of Breeder Seed.
 - Identification and assessment of FAs and periodical assessment of their capacities and performance.
 - Develop training material, methods, organising TOT and develop communication material.
 - Support SPMU in review and planning for the next season, based on the estimates of seed production.
 - Policy development along with SPMU.
 - Develop processes to institutionalise social audit processes in the program.
 - SPMU, Department of Agriculture:
 - Provide overall guidance and monitoring of the program at the district level.
 - Compile and prepare a district seed plan based on the indents received; ensure supply of seed against the indent.
 - Facilitate convergence of other inputs such as Gypsum with seed production program.
 - Resolution of any conflicts or conflicting situations arising in the process.
 - Organise the following review and planning meetings:
 - One meeting to plan, before the season,
 - A review meeting after completion of sowing to take stock of the situation, and plan for the season.
 - Two meetings at the time of harvest/ processing (pre and post-harvest).

1.3.6 Department of Agriculture

DPMU, SPMU provides administrative and technical support to the program along with providing finances, and monitors the program at district and state level respectively. The LTA through its active feedback from the M&E system works with the SPMU, Department of Agriculture at the state level to develop policy and facilitate scaling up of the program

across other districts. JDA, enters into a MoU with the FA, LFAs (at District level) and with the LTA at the state level.

- Responsibilities of Agriculture Officer / ADA, Department of Agriculture:
 - Extend technical support and training in seed production.
 - Visit the seed production plots at least once a month during the critical stages.
 - Link the Vittana Mitra to APSSCA.
 - Facilitate convergence in supply of other inputs like Gypsum and infrastructure like sprinklers.
 - Report any major problems/ issues identified during the season.
 - Release of budgets and payment of incidental charges in time, as per agreed milestones.
 - Records/ Reports to be Maintained:
 - All necessary statutory records and databases.
- Responsibilities of Commissioner, Department of Agriculture:
 - Announce decisions related to any possibilities of subsidy in sourcing breeder/ foundation seed
 - Price fixation in advance of the harvest season
 - Review of the progress during midseason and at the end of the season to identify potential policy / administrative bottlenecks.

1.3.7 AP State Seed Certification Agency

A system of para-certifiers is established to support the APSSCA at the district level, to facilitate seed certification.

1.3.8 ANGR Agriculture University

The Agricultural University provides breeder seed to CMSS along with technical backing where necessary, in addition to training the para-certifiers.

2. PROCESS NOTE FOR MID-SEASON REPORT

2.1. Information to be collected in mid-season report

- i. Breeder seed/foundation seed is distributed to seed producers for Rabi 2018-19 under APDMP, based on need & crops preferred by farmers. FPOs/MVK, FA, LFA and DPMU are the stakeholders involved in the program.
- ii. There is a need to maintain the data at different levels to monitor the program. FAs have to submit mid-season report of FPO/MVK (format -1) to MAO as annexure and letter on FA letter head (See letter 1) with abstract of details (format-2). Same will be shared with LFA.
- iii. LFA will consolidate details and writes a letter with abstract (format-3), along with annexure (format-1) and submits to DPMU and ADA of concerned division. (See letter 2)
- iv. DPMU will consolidate the details (Format- 4) and place an indent to JDA, copy it to COO, SPMU, DM, APSSDCL and LTA-APDMP with Annexure format -3, format -1 (see letter 3)
- v. SPMU will consolidate the data (format-5) and place the request to commissioner- Agriculture and copy it to MD, APSSDCL, Additional DA (Seeds) and LTA-APDMP; along with annexure of format 1, 3, 4. (see letter 4)
- vi. Take indicative procurement price /Quintal based on the last few years' data and use it to calculate working capital requirement, if price memo is not issued. If price memo is issued, use the announced price.
- vii. All the formats are attached in the Annexure 1

3. INFORMATION TO BE COLLECTED IN MID-SEASON REPORT

3.1. Mid-season report

- Revisit the Mid-season report of seed producers; reaffirm the quantities will be available for sale and time of harvest
- Arrive at how many acres and farmers are required in Rabi 2018-19 which were produced in Kharif, 2018 and will be procured by MVKs

3.1. Identification potential seed purchasers with assured irrigation and seed sowing window

- Conduct the village level meetings to identify the Potential Seed Purchasers with assured irrigation and seed sowing window (please see the format)
- Start with cluster villages and identify the potential seed purchasers with assured irrigation and sowing window.
- If sufficient potential seed purchasers are not found, move to villages which are out of cluster and organise the village level meetings with borewell farmers to enrol the seed purchasers with sowing window information
- If above mentioned doesn't work, identify the potential seed purchasers with assured irrigation outside of mandal villages.
- MVK can have agreement with seed farmers within project area preferably and in unavoidable circumstances, outside project area farmers also. Important is that MVK should make farmers preferred seed available to the farmers and it should be a business to MVK

3.2. Assessing the seed demand and supply

- Refer to Mid-season report and potential seed purchasers list with sowing window/ period. Assess and arrive at how much seed is available within the MVK and demand based on potential seed purchases with sowing window (seed format 2).
- Come up with an estimate as to how much seed need to be sourced from MVKs and Notified agencies
- You would also arrive to a conclusion, whether MVK should go for seed procurement or not
- All formats attached in Annexure 2

4. PROCESS STEPS TO GET SEED LICENCE FOR MVKs

4.1. Process Steps

- MVK should be a registered entity. It should have a letter head, round seal with its name. It is a pre-requisite to get the seed license.
- MVK should identify a godown /stock point (within their defined GPs preferably)and agree on the rental charges.
- Enter into a lease agreement at the rental charges agreed on a Rs. 20 non-judicial stamp paper, with the details of the godown owner, representative of MVK and witnesses recorded. MVK round seal should be stamped on the lease agreement
- Prepare a map to the godown, with measurement and routes. MVK round seal should be stamped on godown map.
- MVK should get a Certificate of Seed Source (also known as FORM 2) from seed supplying agency like APSSDCL/OILFED/others
- MVK should have ID proofs of the MVK representatives who are signing on behalf of the MVK.
- MVK has to pay Challan of Rs.1000 in favour of JDA of concerned District. In this challan, need to write major head, minor head, sub head, remitter's name and address and purpose properly.
- MVK has to submit the request to MAO on its letter head with details & annexures (MVK registration copy, bye-law, certificate of seed source, ID proofs of MVK signatories, lease agreement, Godown map with measurements, Challan) with signatures of MVK representatives, round seal.
- After receiving these documents, MAO will visit the godown for physical verification. MAO will upload the documents once he is satisfied with physical verification of godown and documents and MVK will get online application number.
- MAO will share/ submit the hard copy of application with support documents to ADA. ADA will check the soft &hard copies of documents once again, authorise the same if everything is correct virtually. This has to be completed within a week after MAO uploads the documents.
- The JDA office will recheck all hard & soft copies of documents and approves the seed license virtually. If all documents are proper and as required, this has to be done within 15 days after ADA authorization.

4.2. Request Letter from MVK to JDA along with support documents

- Support documents needed from MVK
 - MVK Registration Certificate
 - MVK Bye-laws
 - Certificate of Seed Source
 - Godown Lease Agreement
 - Challan
 - MVK Representative (Person Responsible) Agreement
 - ID proofs of MVK Representative
 - Self-Declaration

5. PROCESS STEPS TO GET PROCESSING UNIT LICENCE FOR MVK

5.1. Process Steps

MVKs that produce seed need to get Processing Unit licenses from APSSCA. The process steps are as follows:

- MVK has to collect the application form APSSCA office and fill it with proper details
- MVK representatives have to sign and use the MVK round seal on the application form and prepare 3 such sets
- Get a Demand Draft for Rs. 5510 in favour of Member Secretary, APSSCA, Guntur.
- Write a request on the MVK letter head with signatures of representatives and the round seal

5.2. Support documents that need to be submitted:

- Form 1 Triplicate
- Demand Draft of Rs 5510
- Godown Lease Agreement
- Godown measurements and route map to show the location of the godown
- No Objection Certificate (NOC) with regard to pollution from village panchayat/MRO.
- MVK pan card
- MVK registration copy
- Seed License
- Processing unit purchase bills
- Electricity bill as proof
- Three A4 size colour photos (Photo should depict the area of godown with name board and processing unit),
- MVK representative (responsible person) ID proofs

6. PRICE FIXATION UNDER CMSS

6.1. Price Fixation Committee

JDA has to constitute a district price fixation committee consisting of DMs of APSSDCL, OILFED and MARKFED, ADA -Marketing, representatives of FPO (2) per district, LFAs (one per LFA), LTA (1) and DPMU (1). PD, ATMA will nominate an officer as convener and JDA will chair the meeting.

SPMU has to send letters to the concerned PDs, ATMA and JDAs to organise district price fixation committee meetings to begin the process.

Convener after consultation with JDA will convene the meeting and send the notification of the same to district price fixation committee members in advance. The meeting should happen once harvesting has begun and goods start arriving in the markets and should not be delayed further.

Points to be consider in price fixation

- Price should not be less than MSP as its a Govt. procurement
- It should not be less than Grade 1 grain price in the markets as it is a seed
- Price should be attractive to seed producers and it should not increase the burden on Seed purchasers and Govt.

Each LFA should come up with the cost of cultivation and expected yield, market price of grains in nearby markets / price offered by middlemen in villages

Officials from APSSDCL/OILFED/MARKFED/MARKETING department will also come up with the market prices prevailing in nearby markets, as per their sources.

DPMU will collect the market prices from Agmark, AP and farmers' portal and any other sources.

The committee will meet on the scheduled day and discuss the market prices of the commodities (under CMSS) within the district and adjoining markets. They will also take into consideration the cost of cultivation. The Seed cell of the JDA office prepares the minutes and takes the signatures of all the participants. It also submits the recommendation on price fixation to Commissioner - Agriculture for approval and marks a copy to COO, SPMU.

SPMU will coordinate with the seed section at the Commissionerate and makes a note file and pursues the Commissionerate and Secretariat get the price memo. Once price memo

is issued, SPMU will share it with all DPMUs, LFAs and the Additional DA (Seeds) will share it with all concerned JDAs.

6.2 Indicative check list for cost of cultivation exercise: (for different oil types)

| Sr. No | Details |
|--------|---|
| 1 | Seed cost in Rs |
| 2 | Seed treatment |
| 3 | <u>Fertilizers used (No. Of bags)</u> |
| | 3.1. Basal dose |
| | 3.2. Top dressing |
| 4 | Gypsum (Qtls) |
| 5 | Seed sowing costs |
| 6 | Weed management (Rs/ Acre) |
| 7 | Pest management (Rs/ Acre) |
| 8 | Harvesting cost (Rs/ Acre) |
| 9 | Stripping of pods (Rs/ Acre) |
| 10 | Threshing cost (Rs/ Acre) |
| 11 | Family labour opportunity cost (Rs/ Acre) |
| 12 | Seed certification registration cost (Rs/ Acre) |
| 13 | Printing of tags cost (Rs/cost) |
| | Total Cost/ Ac |
| 14 | Total expected yield (Qtl/ Ac) |
| 15 | Grain Market price/ Qtl |

6.3 Proposed prices by district price fixation committee format:

| Sr .No | Particulars | FS1 (Rs/Qtl) | FS2 (Rs/Qtl) | CS1 (Rs/Qtl) |
|--------|--|-----------------|-----------------|-----------------|
| | Part A | | | |
| 1 | Grain price (need to take it from grain market) | | | |
| 2 | Premium price | 700 | 500 | 300 |
| 3 | Purchase price (1+2) | | | |
| 4 | APSSDCL incidental charges | 200 | 200 | 200 |
| 5 | Cash evacuation & Deposit | 40 | 40 | 40 |
| 6 | Incidental charges of MVK, FA, LFA & LTA | 480 | 480 | 480 |
| 7 | Sale price (3+4+5+6) | | | |

7. INCIDENTAL CHARGES FOR CMSS UNDER APDMP

Incidental charges under CMSS are loaded into the price (See table 1). As mentioned in the mid-season report process note, DPMU & SPMU will consolidate the mid-season report and place the request for working capital advance to APSSDCL.

MVKs will start the seed distribution as planned by the Department of Agriculture. Seed purchasers will pay the non-subsidy amount (while purchasing the seed) to MVKs based on the subsidy announced by the Department of Agriculture. It will be deposited in the MVKs bank account. While paying back, incidental charges of all stakeholders will be retained by MVKs and rest will be paid back to APSSDCL.

7.1 Incidental Charges Break-up

| Sl. No. | Cost Item | MVK (Rs/kg) | Facilitating Organization (Rs/kg) | LFA (Rs/kg) | LTA (Rs/kg) | Total Rs/Kg |
|---------|---|-------------|-----------------------------------|-------------|-------------|-------------|
| 1 | Incidental Charges/ Facilitation costs | 3.3 | 1.2 | 0.15 | 0.15 | 4.80 |
| A | <u>Cost of Bag</u> | 0.7 | | | | |
| | Processing | 0.65 | | | | |
| | Labour | 0.55 | | | | |
| | Logo Printing | 0.2 | | | | |
| | Bag Stitching | 0.15 | | | | |
| | Resource fee for MVK | 0.65 | | | | |
| | Certification Facilitation Cost | 0.40 | | | | |

Utilisation Certificates will be generated by MAO and will be signed by MAO, MVK and FA representatives. LFA has to keep track of this and update the DPMU. If any issues are raised in submission of UCs, DPMU will interfere.

FA maintains the data and shares it with LFA. LFA will maintain the data of FAs for monitoring and shares it with DPMU (see format 1 & 2). It will be concluded by submission of UCs and invoices.

8. A BRIEF NOTE ON PROCEDURES TO BE FOLLOWED IN CMSS TO INITIATE PROCESSING, PACKING, STACKING AND DRAWING SAMPLES, TAGGING FOR SEED PROCUREMENT

8.1 Initiation of Processing of Harvest

- All the seed farmers have to register with APSSCA by submitting Form 1 along with Demand Draft (DD), towards certification registration charges
- Once harvesting begins, MVKs need to get the RythuAngeekarapatramu, complete the arrival statement and get it signed by Mandal Agriculture Officer (MAO), refer (Annexure 1 and 2)
- Facilitating Agencies (FAs) have to submit these documents (arrivals statement and RythuAngeekaraPatramu) to Senior Seed Certification officer (SSCO) in their respective district
- Based on arrivals statement, SSCO will issue a Transfer Certificate (TC), (Annexure 3)
- Identify the mobile processing units with license; as MVKs don't have processing unit infrastructure at the current juncture
- Once MVKs receive the TCs, processing can be done at the mobile processing units
- Seed producers have to pay processing supervision fee @ Rs.9 per quintal to MVK. The MVK has to pay based on total quantities mentioned in the TC. MVKs have to pay to APSSCA through a DD. DD should be drawn in favour of Member Secretary, APSSCA, Guntur.

| Date | Processing Unit Number | Place | Door Number | Time | |
|------|------------------------|-------|-------------|------|----|
| | | | | From | To |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

8.2 Storage of Seed in Godowns / Stock points

All MVKs should have seed licenses and notified godowns / stock points (See process note on seed license)

How to Calculate Area for Storage

It is an important exercise to arrive at how much area is required and how many number of stock points/godowns are needed. It is strongly suggested not to rely on gut feeling or casual estimation as it would lead to Storage issues.

- Yield = Expected Yield+ 20% of Expected Yield (Example: 90 quintals is expected yield+ 18 quintals (20% of expected yield)
- Leave 2 ft space along the walls and roof to protect from moisture/temperature fluctuations. Area = length X width X height (after leaving out the 2ft space)

Example: If the godown measures 20ftX25ftX10ft, Area = 18ftX23ftX8ft i.e 3312sqft.

- How many bags can be accommodated in 3312sqft area?
 - A filled bag occupies 9Sqft area (measurements of bag 3ftX2.5ftX1.2ft=9sqft).
 - Total number of bags that can be accommodated = Total area/ Area occupied by one filled bag i.e3312sqft/9sqft = 368 bags)
- How many quintals can be stored in 3312sqft?
 - Each filled bag weighs 30 kgs i.e 368 bagsX30 kgs=11040 kgs(110.4 quintals)

8.3 Infrastructure and Equipments Needed for Processing

The table below gives a brief on list of Infrastructure and Equipments needed.

| Sr. No | Infrastructure/Equipments |
|--------|--|
| 1 | Weighing Machine |
| 2 | Stitching machine |
| 3 | Moisture Meter |
| 4 | Balance to measure shelling percentage |
| 5 | Thresher |
| 6 | Bags with printed logos (Govt of AP, APSSDCL, ManaVittanam and APDMP) –APDMP logo can be printed besides ManaVittanam Logo |

Bag printed with Logo



8.4. Arranging the Infrastructure in MVK for Current Season

- **Strategy 1:** Map the shops that have weighing machine (100kg), stitching machine, thresher, etc. (the Infrastructure Needed for Processing*) and these equipments can be rented.
- **Strategy 2:** If MVK knows a farmer/ MVK with the Infrastructure available for Processing*, this equipment can be borrowed on returnable basis for short period.

The order should be placed to procure the bags with Logos

8.5 Processing

- Primary processing is the farmers' responsibility. MVK procurement committee has to purchase the seed, based on the quality assessment committee report.
- Quality parameters for Groundnut seed: Purity-96%, foreign material-4%, Germination - >70%, moisture content- <9%, Shelling % - >/=72%

8.6 Packing

- Fill the details like lot number, crop, variety name, Net weight (kg), moisture %, sale price etc., on the bag
- Check weighing machines once you start using them. Advisable to fill 30.5 kg (i.e. 500 grams more) as weight reduces as the temperatures rise

8.7 Stacking the Bags in Godown

- Godown management is all about organisation, stock management, record keeping and cost containment. These are critical to ensure the MVK profitable

Stacking of bags at MVK Godowns



- Seed bags should be stored in notified Godowns only. Seed is better stored on pallets than the floor. This allows easier cleaning and sweeping around the stacks, and allows air to circulate through the stack
- While stacking the bags, it should be done lot wise.
- Lot wise details like crop, variety, number of bags stacked should be written on A4 size paper and hung on one of the bags.
- Outside the Godown, details of number of lots, crop, variety need to be displayed

8.8 Drawing Samples

- APSSCA officials will draw the sample, to measure the physical purity, germination, shelling %, and quality parameters
- No. of sample need to be drawn will be decided based on the number of seed bags in a lot
- Sample drawn will be divided into three parts, i.e. a 3 kg sample taken out will be made into three, 1 kg bags. One sample should be kept with the MVK, till the lab results are out. APSSCA would take the other two bags/samples, keeps one bag/sample with them and another bag / sample will be sent to the lab test. If lot gets failed, retained lots will be used as reference to trace.
- 8-10 days after the samples are drawn, APSSCA will communicate, the lot wise lab results and issue the tags (soft copy)
- MVKs take printouts of the tags and APSSCA officials will write the details on tags and officially sign and put the official seal
- Once MVK get the tags, they need to be stitched to the bags

9. ANNEXURES

9.1 Annexures – 1



Mid season-Format
1& 2- FA consolidation



Mid season-Format
3-LFA consolidation.x



Mid Season-format
4-Consolidation repor



Mid season-Format
5- Consolidation repo

9.2 Annexures – 2



Seed Indent.xlsx



Working capital
Advances_data maint