# Implementation Guidelines 2025-26

बागवानी मिशन
Horticulture Mission

## Mission for Integrated Development of Horticulture (MIDH)

**Horticulture Department, Telangana**

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# Norms & General Implementation procedure

## A. Norms & Pattern of Assistance and Popularization of Scheme:

1. Norms are as per the norms of Mission for Integrated Development of Horticulture – Operational Guidelines, 2025, GOI.
2. **The cost norms are indicative which are valid upto further guidelines.**
3. The Director of Horticulture and Mission Director shall make necessary tie-ups arrangements every year and empanel reputed firms/suppliers for supply/sale of planting material/ machinery and inputs / materials under schemes strictly as per the guidelines issued by Govt. of India from time to time.
4. Component are to be implemented as per the cost norms communicated firms empanelled if any and instructions issued by Director of Horticulture and Mission Director, MIDH from time to time.
5. The District-level targets communicated by the Director of Horticulture, DHSO shall further to be allocated into HO & Mandal wise as per the suitability of soils.
6. Schemes shall be popularized mainly through existing extension network of the department and other resources available to them. publicity shall be given with awareness of the programmes by print and electronic media.

## B. Eligibility Criteria for availing assistance

1. Only those Farmers or entrepreneurs having land ownership in Telangana State shall be eligible for availing assistance under the Schemes. In case of non - ownership of land the eligibility be guided as below:
   i. For non-project-based activities and seasonal/annual crops: registered lease agreement between the parties for **Ten years** for orchards.
   ii. For project-based activities: registered lease agreement between the parties for **fifteen years**.
2. Assistance shall be given for Horticultural crops only as per the GOI norms and guidelines. plantation/cultivation shall be admissible only to the beneficiary having an assured source of irrigation (tube-well/water tank supported with engine).
3. Farmers shall procure plant material from any Govt. Farms / Research Stations / accredited nurseries of their choice.
4. Subsidy shall be admissible both in loan and non-loanee cases.
5. Subsidy in loan cases shall be released to the beneficiary account or loan account as the case may be.

## C. Procedure for availing assistance

1. The farmer shall submit application to the DHSO/HO in the prescribed format.
   i. **Form-1 in case of non-project-based activities**

   Beneficiary can register details through online in MIDH Suraksha portal(After on Boarding) (midhsuraksha.in) or submit the application to DHSO office through **HO's** along with required documents (Land documents, Identity documents, Bank Details etc.).

ii. **Form-2 in case of project-based activities**

Applications/ Project proposals are to be sent to Head office with the approval of DMC, **the same shall be placed in SLEC to get approvals as per delegation of powers communicated by GoI**.

2. For Project Based Proposals Documents shall collect as per **Checklist** annexed at the respective component guidelines.

**D. Record of Applications and dispersals.**

1. The details of beneficiary shall be entered in MIDH Suraksha portal(After on Boarding) and where no online system is in operation, the application so received from the farmer-applicant shall be immediately entered by the concerned officer. Further, **HO** shall also issue a receipt to the applicant indicating the Serial Number / ID and date of receipt of the application.
2. The HOs shall verify the application form submitted by the farmer and forward it to the DHSO of the concerned district along with **HO** recommendation within 3 days of the receipt thereof. HO shall ensure that proper checklists and documents are enclosed as prescribed under the guidelines.
3. In case of more applicants priority/preferred shall be given to **"FIRST COME FIRST SERVE" basis**. HO, DHSO shall keep proper record of applications.
4. The DHSO shall get the applications registered online, as well maintain hard copies of the same, only after proper scrutiny as follows:
    i. The farmer belongs to the concerned district/holding land in also same district
    ii. The farmer is not being given the any benefit for the second time for the same component.
    iii. Any farmer who has been benefitted under any scheme since 2014-15 shall not be eligible for the same component again subject to the maximum limit prescribed under the guidelines.
5. DHSO shall make a seniority list for HO jurisdiction (if there are more number of applications than allotted target). After authentication by the HOs, the seniority list shall be maintained in the record and shall be duly published on the Notice Board. The register or computerized seniority shall contain the details as Sr No., Name of farmer, father's name, village, block, date of submission of application, total area to be covered under scheme and signature of farmers etc.
6. DHSO/HO shall accord the approval of sanction within 7-14 days of receipt from office.
7. Farmers register shall be maintained by concerned DHSO officer. HO shall issue the slip to the farmer mentioning farmer seniority number after obtaining signature of the concerned farmer in Farmer seniority register duly maintaining SC/ST ratio

**E. Implementation including Physical Verification**

1. With regard to components *viz.,* Area Expansion, Poly houses/ Shade net Houses, post-harvest management units and other physical structures, proper verification shall be done by the HO, DHSO in the format. The physical verification shall be

done as per the proposed guidelines and specifications issued by the SHM Cell, Head office. The physical verification and the report thereof shall be submitted to the office as per the timeline indicated against the respective component.

2. In case of purchase of plant material/inputs the following guidelines Shall be followed:

   i. DHSO/DHM shall make advance arrangement for procurement of planting material from accredited nurseries/certified planting material/certified seeds for ensuing season. DHSO/DHM shall have a mechanism in place for the proper certification and distribution of planting material/seeds. Sourcing of planting material/seeds from ICAR institutes, SAUs, KVKs and Government Department/ CoEs is to be given priority over other sources. Area Expansion shall be restricted to availability of planting material from accredited nurseries/certified Planting Material. In case of Truthfully Labelled (TL) seeds, it shall be procured only from public sector agencies. Merely procurement of the planting material/seed through the public sector agencies like Seed Corporation, Agro Corporation and other agencies do not ensure the quality of planting material/seed as they do not produce the same. DHSO/DHM shall ensure that these public sector agencies procure certified material and in case certified material is not available, seedlings/ TL seeds are to be procured only from ICAR institutes, SAUs, KVKs and Government Departments.

   ii. Farmers are free to purchase planting material and inputs from any of the empanelled / registered firms or accredited nurseries by paying the full amount directly to the firm and take a bill for that purchase.

   iii. Farmers are free to choose the farm equipment's from empanelled firms under MIDH as per conditions prescribed under the specifications.

   iv. The farmer shall resubmit the **original bill** back to the DHSO as a proof of the purchase of the component/input. The DHSO shall thereafter issue a **receipt** for the original bill to the farmer-applicant.

   v. The physical verification of the material/input purchased shall be carried by the HO/DHSO in the prescribed format.

   vi. The physical verification report shall reach the office of DHSO within 5 days of purchase/ Grounding.

   vii. Display board depicting details of the Scheme (as per applicability) in Telugu shall be fixed at the Site of PHM & PC components.

**Sample Display Board:**

**సమీకృత ఉద్యాన అభివృద్ధి మిషన్**

తెలంగాణ రాష్ట్ర ప్రభుత్వం

ఉద్యాన శాఖ

పథకం వివరాలు

యజమాని పేరు : గ్రామము :

మండలము : జిల్లా:

సెల్ నెం : విస్తీర్ణం / నెం.:

అనుమతి పొందిన సంవత్సరం :

మొత్తము ప్రాజెక్టు విలువ: లక్షలలో } (in case of PHM & PC)

ఋణ సౌకర్యం పొందిన బ్యాంకు మరియు శాఖ వివరములు :

ఉద్యాన శాఖ ద్వారా రాయితీ పొందిన వివరములు ( లక్షలలో):

* **Mandatory**

## F. Release of Assistance

1. **Criteria for release:** Physical inspection as prescribed below shall be done within 15 days of work completion:
2. In case of non-project-based activities: 100% verification by the **HO** in all the cases in his jurisdiction and 20% to 50% verification by DHSO concerned in HO jurisdictions is mandatory.
3. In case of farm ponds: the work executed shall be duly verified by the committee so constituted.
4. In case of project-based activities: Work done shall be duly verified and inspection report submitted by the team comprising of DHSO, HO concerned, Sr. Officer from Head Office, technical expert in the field of component from SKLTSHU/PJTSAU (TSG Member), representative from 3rd party and representative from concerned bank as suggested in the check lists/or as communicated by Head office from time to time.
5. Stage wise digital photos to be taken before work, at the time of work and after completion

of work.

i. **Release:**

a. Subsidy is to be released as per norms fixed and guidelines prescribed

b. Subsidy proposal to be submitted within a month of physical inspection report duly obtaining DMC approval.

c. Subsidy is to be released per Ha or per unit basis as the case may be. In cases where assistance is being sought on lesser or more area than that of one Ha or one unit then subsidy be released on pro-rata basis subject to maximum limit prescribed in guidelines under MIDH as per the net area sown / planted.

d. Determination of per Ha or unit can be ascertained as prescribed against individual component in the guidelines.

e. Subsidy be released directly to the beneficiary as direct assistance or as inputs as per the instructions issued from Mission Director time to time for individual component.

a) For direct release of assistance to the beneficiary, payment shall be released through SNA SPARSH (DBT) to the beneficiary only.

b) No payment shall be released as cash/ cheque /D.D by taking signature or thumb impression in register.

c) All the assistance released shall be entered in proper register and in cash book.

d) Soft copy of Beneficiaries list shall be maintained properly to produce at Audit.

**G. Reporting:**

1. DHSO shall send the physical and financial progress of HO district monthly in prescribed format on or before 3rd of every month.
2. The **DHSO shall be the controlling officer** for successful implementation of the Scheme (s) and co-ordination of all the schemes under which various components are being implemented as per the scheme guidelines. He / She shall also ensure that, the scheme is duly publicized in the district immediately after the targets are allotted.

i. Wide publicity shall be given for the target allotted to the districts on all components.

ii. Tours to be conducted for creating more awareness in the districts.

iii. The selected farmers under all components shall be given prior training at districts.

iv. Only the farmers willing to take-up training on particular schemes shall be selected for subsidy programmes.

## NON-NEGOTIABLES FOR IMPLEMENTATION OF MIDH SCHEMES 2025-26

1. Identification of beneficiaries shall be done as per guidelines communicated under each component.
2. Identification of beneficiaries shall be as per targets allotted and to be completed as per season wise .
3. It shall be ensured that **15.44 % and 9.34 % funds are to be targeted for SC and ST farmers respectively** and **33% of budget allocation** shall be earmarked exclusively **for women** beneficiaries/ farmers.
4. Cluster approach shall preferably be adopted with a minimum area of 10 Ha / target allotted in AAP in each cluster for one crop for easy monitoring.
5. After identification of beneficiaries under each component training have to be organized at field level.
6. Approval of District Mission Committee (DMC) is mandatory for implementing each scheme, issue of administrative sanctions and release for all the SHM schemes under MIDH. DHSO is the district head who is responsible for obtaining DMC approval of 2025-26
7. Filing of applications in Suraksha portal(After on Boarding) is mandatory for all components towards release of funds. The DHSO/HO shall see that Mobile number shall compulsorily be entered.
8. The plantation preferably be taken up in cluster mode only, assured irrigation source & integration with Micro Irrigation is non-negotiable.
9. Plant material for Area expansion programme has to be procured on priority from the accredited Govt. nurseries/ Horticulture / ICAR institutes.
10. Awareness programmes shall be organized under all components, specifically, Post-Harvest Management, Special Interventions.
11. The Projects proposed under Post Harvest Management, Special Interventions shall be linked up with farmers, corporate retail outlets, processing units and exporters so that the losses / wastage of the horticulture produce are minimized and all the details shall be incorporated in the project proposals.
12. Proposal for project-based components shall be sent after approval of DMC and the proposals shall be sent to Head office as per timeline indicated.
13. All the identified beneficiaries shall have a valid **Bank account**. Otherwise, they have to open a new bank account. The bank account number, IFSC code etc., have to be verified by the DHSO/HO concerned personally.
14. DHSOs/HOs shall ensure the bills produced by the beneficiaries are from the registered firms/companies, before forwarding release proposal to head office.
15. **The assistance shall be given taking family as a unit.**
16. It is the responsibility of DHSO to update the progress reports on 3$^{rd}$ of every month. It is compulsory.
17. Bounded hard copies of all the schemes implemented in the districts along with the photographs have to be kept in office.
18. It is mandatory to submit the success stories / case studies of each year along with photographs.

19. Monthly district monitoring committee meeting to be convened under the chairman ship of District Collector with all the members.

## GUIDELINES FOR SELECTION OF BENEFICIARIES FOR DIFFERENT SCHEMES BEING IMPLEMENTED UNDER MIDH

**GENERAL: (Common to all components and activities)**

1. Potential Villages are to be identified (species & crop wise) in cluster mode with convergence of allied Departments.
2. Wide publicity to be given in the identified locations / areas on benefits / facilities being provided by the department through local newspapers, electronic media, pamphlets, display on the notice board of Z.P.Ps / M.P.Ps / Village Panchayats.
3. Approved schemes, assistance provided and locations identified are to be clearly explained in the meeting of DRC / Z.P.P's / M.P.P's and other coordination meetings with allied departments.
4. Success stories to be sent to DPRO for publicity.
5. The selected farmers shall be explained the package of practices to be adopted for the species selected under all schemes with literature.
6. Due preference shall be given to SF / MF, SCs, STs and Women as per the norms in selection process.
7. During selection care shall be taken to ensure that amounts indicated in the AAP under SCSP & TSP are to be allotted to SC/ST farmers only and 33% of the budget allocation shall be earmarked exclusively for women beneficiaries. No deviation is permitted.
8. **The crops identified under One District One Focused Produce (ODOFP) in respective district by Ministry of Agriculture & Farmers Welfare (MoA&FW), GoI shall be given priority in appropriate component**.
9. **Special efforts shall be made for Area expansion under Exotic and Niche crops and crop specific FPOs for Exotic and Niche crops**.
10. The HOs / DHSOs shall hold village wise meetings involving progressive farmers, Gram Sarpanch and Village Secretary and finalize the list based on the norms prescribed for different schemes implemented in the districts.
11. After selection and verification of the required documents the list of beneficiaries shall be placed before DMC for approval. After approval by the DMC, administrative sanction to the beneficiary shall be issued through the District Collector only. (In case non-Project based proposals)
12. DMC meeting shall be organized as frequently as possible (GO Ms No.1, dt: 07.06.2014 of the Agri & Co-op Dept, Govt. of Telangana) and minutes to be sent to SHM for record purpose, release of funds etc.,

13. **Inputs (manures, fertilizers & PP chemicals)**:

    a) It is permitted to consider self- declaration from the farmers for procuring and utilization of recommended inputs (manures, fertilizers & PP chemicals) under various components like Area Expansion, Rejuvenation, etc., under MIDH for release of assistance. But it shall be ensured that the eligibility criteria and sub-component wise cost norms for inputs under various components are to be strictly adhered to.
    b) The self-declaration from the farmers is to be mandatorily counter signed by the concerned Horticulture Officers and same shall be ensured by the DHSOs concerned. Further, 100% field verification by the HOs and random inspections by the DHSOs is to be scrupulously followed.
    c) The self-declaration from the farmers is only considered for inputs like manures, fertilizers & PP chemicals only but not for implements and machinery.

**Other Important Points for Implementation:**

1. More focus is to be given on enhancing productivity of horticulture crops for the holistic development supported with infrastructure for Pre- and Post- Harvest Management and Marketing.
2. To improve the productivity of existing old and senile orchards, there is need to identify gaps and revise the existing strategy for achieving the desired results. A proper mechanism needs to be devised to disseminate technology and train farmers on rejuvenation technology. Exposure visit of farmers shall be organized to those institutes/places where rejuvenation technology has been developed and also adopted by the farmers.
3. The programme for protected cultivation and lining of Community tanks/ponds shall be taken up in close coordination with the CRIDA/ Precision Farming Development Centre (PFDC) in the State.
4. Protected Cultivation of vegetables shall be promoted under MIDH/NHM in clusters around major cities/metros. These clusters may be provided with other infrastructural facilities like pre-cooling units, cold storages, reefer vans, vending carts etc. and marketing arrangements may be tied up by linking with cooperatives/private retail chains like SAFAL, farmer markets.
5. Organic farming shall be linked to certification. No separate funds shall be provided for adoption of organic farming alone. Arrangements shall also be made by the SHM or concerned agency for the marketing of organic produce. Selection of Service Provider Agencies is to be done by adoption of competitive bidding.
6. IPM measures shall be need based and are to be taken after clearly identifying the problem of pests/disease in the clusters. INM measures are to be adopted in the clusters to correct soil deficiency and reduce excessive dependence on chemical fertilizers.

7. The creation of water harvesting structure shall be implemented in conjunction with Mahatma Gandhi National Rural Employment Guarantee Scheme (MNREGA) wherever feasible and shall be compulsorily linked with the new area expansion and micro-irrigation programmes.

8. For implementation of horticulture mechanization, PHM, marketing and mobile/primary processing activities, DHSO/HO shall make efforts to organize self- help groups, farmers' interest groups, growers' association at local level and also involve Panchayats, Cooperatives, Producers Company etc.

9. Efforts shall also be made for the buyback arrangements of the horticulture produce.

10. DHSO/HO shall involve research stations / KVKs/ DAATC centers of State Agricultural University / State Horticultural University and ICAR Institutes in the Districts for the extension activities.

11. While implementing the MIDH programme, convergence and synergy shall be ensured with the other schemes like Micro Irrigation, RKVY, PKVY, MNREGS, National Mission on Medicinal Plants, AEZs of APEDA, Tribal Sub Plan, Watershed Development Programmes, BRGF and Schemes of the State Government.

12. The success stories of various components to be documented and submitted to state office.

13. The Ministry of Agriculture and Farmers Welfare, GoI in consultation with the Ministry of Food Processing Industries, has prepared a list of agricultural and allied sector products for the programme of "One District One Focus Produce". It was informed that the identified products need to be promoted in a cluster approach through convergence of the Government of India schemes, to increase the value of the products and with the ultimate aim of increasing the income of the farmers. The following horticulture crops are identified under ODOFP in Telangana State:

| S.No | Focus produce | District |
|---|---|---|
| 1 | Chilli | Bhadradri-Kothagudem, Mulugu, Mahabubabad, Bhupalapally, Khammam |
| 2 | Mango | Jagityal, Mancherial, Nagarkurnool |
| 3 | Nalgonda | Sweet orange |
| 4 | Nizamabad | Turmeric |
| 5 | Vegetables | Rangareddy, Vikarabad, Siddipet |
| 6 | Bamboo Chili | Warangal |

14. Hence, due importance may be given to the above focus produce/ crops under the relevant components under AAP of MIDH.

15. The GoI has informed that, for all the PHM components included in the AAP, the State shall facilitate the prospective beneficiaries for availing the financing facility under Agri-Infrastructure Fund scheme. Hence, the DHSOs shall popularize the facility of AIF among the farmers/ entrepreneurs who are availing credit facilities for the activities/ projects. Details on Agri Infrastructure Fund are available in www.agriinfra.dac.gov.in portal.

## 1. PLANTATION INFRASTRUCTURE DEVELOPMENT

### A. LARGE – PUBLIC SECTOR & PRODUCTION OF QUALITY SEED AND PLANTING MATERIAL INCLUDING HANDLING, PROCESSING, PACKING & STORAGE FOR IDENTIFIED HORTICULTURE CROPS

| S.No | Item | Max permissible Cost | Pattern of Assistance |
|---|---|---|---|
| 1 | Large Nursery (1 to 2 ha) | Upto Rs. 30 lakhs/ Ha.<br>Cost of large nursery on pro rata basis:<br>1 ha. - 30.00 lakh<br>2 ha. - 30.00 lakh x 2 | Assistance @ 100% to public sector and @ 40% to private sector for an area from 1 to 2 ha. as project based activity, on pro-rata basis.<br><br>Each nursery shall produce a minimum of 1,00,000 plants per hectare per year of mandated perennial fruit plants, tree spices, aromatic plants, plantation crops, perennial flowers etc. duly certified for its quality.<br><br>Accreditation of each Hi Tech nursery shall be mandatory within 18 months from the date of release of last instalment. |
| 2 | Small Nursery (0.4 to 1 ha) | Rs. 20 lakhs/Ha. | Assistance @ 100% to public sector and @ 50% to private sector for an area from 0.4 to 1 ha. as a project based activity, on pro rata basis. |
| 3 | Production of quality Seed and Planting Material including handling, processing, packing & storage for identified horticulture crops | Project based for a project cost upto Rs.300 lakh/year. | Assistance @ 100% to State Govt. / Public Sector and in case of private sector, credit linked subsidy @ 50% including FPOs, FIGs, SHGs and Cooperatives as project based activity. |

## Production of planting material

### i) Small Nursery (0.4 to 1 Ha.):

**Total Unit Cost: Rs. 20.00 lakh/Ha. as project based activity, on pro-rata basis.**

100% assistance of unit cost amount will be provided to public sector and in case of private sector, back-ended subsidy of cost, subject to a maximum 50% of Rs.**10.00 lakh/unit**, as project based activity. Each nursery will have to produce a minimum of 50,000 numbers plants per ha of mandated perennial fruit plants, tree spices, aromatic plants, plantation crops, perennial flowers etc. per year, duly certified for its quality by concerned agency.

It is mandatory that Small nursery established should get Accredited within 18 months from the date of release of last instalment.

**INFRASTRUCTURE PROPOSED FOR DEVELOPMENT OF SMALL NURSERY**

| Sl. No | Name of the component | Estimated Cost (Rs. in lakhs) | Subsidy allowed 100% under public sector (Rs. in lakhs) | Subsidy allowed 50% under private sector (Rs. in lakhs) |
|---|---|---|---|---|
| 1 | Establishment of scion block (1.50 Acre) required crop wise, variety wise plant material will be procured from Research Station / certified nursery. | 2.65 | 2.65 | 1.325 |
| 2 | Installation of drip irrigation for new scion blocks / existing scion block or orchards | 0.80 | 0.80 | 0.40 |
| 3 | Digging of bore well (Depth in meters) & Purchase of submersible pump | 2.50 | 2.50 | 1.25 |
| 4 | Erection of shade net 500 sq.mt @ Rs. 710 per sq. mt. (Tubular / rectangular structure) | 3.55 | 3.55 | 1.775 |
| 5 | Vermicompost unit (600 cubic feet each) (1 nos.) | 1.00 | 1.00 | 0.50 |
| 6 | Electrification of farm to the extent required | 1.00 | 1.00 | 0.5 |
| 7 | Land preparation if required | 1.20 | 1.20 | 0.60 |
| 8 | Construction of store room | 3.00 | 3.00 | 1.50 |
| 9 | Fencing @Rs.300 per running metre | 2.00 | 2.00 | 1.00 |
| 10 | Miscellaneous | 2.50 | 2.50 | 1.25 |
| | **Total** | **20.20** | **20.20** | **10.10** |
| | **Limited to:** | **20.00** | **20.00** | **10.00** |

**ii) Large Nursery (1 to 2 Ha.):**

**Total Unit Cost: Rs. 30.00 lakh/Ha. as project based activity, on pro-rata basis.**
**1 Ha. – Rs.30.00 lakh.**
**2 Ha. – Rs.30.00 lakh x 2.**

100% assistance of unit cost amount will be provided to public sector and in case of private sector, credit linked back-ended subsidy of cost, subject to a maximum of Rs.15.00 lakh/unit, as project based activity. Each nursery will have to produce a minimum of 1,00,000 numbers plants per ha of mandated perennial fruit plants, tree spices, aromatic plants, plantation crops, perennial flowers etc. per year, duly certified for its quality by concerned agency.

It is mandatory that Hi tech nursery established should get Accredited within 18 months from the date of release of last instalment.

**INFRASTRUCTURE PROPOSED FOR DEVELOPMENT OF LARGE NURSERY for 1Ha**

| Sl. No | Name of the component | Estimated Cost (Rs. in lakhs) | Subsidy allowed 100% under public sector (Rs. in lakhs) | Subsidy allowed 40% under private sector (Rs. in lakhs) |
|---|---|---|---|---|
| 1 | Establishment of scion block (2.00 Acre) required crop wise, variety wise plant material will be procured from Research Station / certified nursery. | 3.60 | 3.60 | 1.44 |
| 2 | Installation of drip irrigation for new scion blocks / existing scion block or orchards | 1.20 | 1.20 | 0.48 |
| 3 | Digging of bore well (Depth in meters) & Purchase of submersible pump | 2.50 | 2.50 | 1.00 |
| 4 | Erection of shade net 1000 sq.mt @ Rs. 710 per sq. mt. (Tubular / rectangular structure) | 7.10 | 7.10 | 2.84 |
| 5 | Vermicompost unit (600 cubic feet each) (2 nos.) | 2.00 | 2.00 | 0.80 |
| 6 | Electrification of farm to the extent required | 1.00 | 1.00 | 0.40 |
| 7 | Land preparation if required | 1.00 | 1.00 | 0.40 |
| 8 | Construction of store room / grafting shed | 4.00 | 4.00 | 1.60 |
| 9 | Farm Pond (20*20*3 mts) | 1.50 | 1.50 | 0.60 |
| 10 | Fencing @ Rs.300 per running meter | 2.00 | 2.00 | 0.80 |
| 11 | Nursery equipment's | 1.10 | 1.10 | 0.44 |
| 12 | Miscellaneous | 3.00 | 3.00 | 1.20 |
| | **Total** | **30.00** | **30.00** | **12.00** |

## Terms & Conditions:

The beneficiary has to establish the proposed infrastructure within the total cost of the operational guidelines of MIDH.

- Mother plants has to be procured from ICAR Institutions/ Research Stations only.
- The beneficiary has to produce the standard quality plant material.
- The beneficiaries shall submit application to DHSOs (as per the district targets only) in the prescribed format along with the Pattadar Passbook or **Lease Agreement document executed for 10 years along with the certificate issued by Tahsildar / Panchayat Secretary for proof of land** .
- The beneficiary shall also enclose the water & soil analysis report from the approved lab.
- DHSO/HO should verify the site physically.
- After the inspection of the site by the concerned H.O. and DHSO, the proposal should be obtained in the form of a project (Detailed project Report by the beneficiary and the project with the recommendations should be placed before the District Mission Committee (DMC) for sanction of the proposals for Establishment of Nurseries.
- After approval of District Mission Committee (DMC) the Detailed Project Report should be forwarded to O/o /Director of Horticulture.
- The proposal will be placed before the State Level Executive Committee for sanction of the proposals for Establishment of Nurseries.
- After approval by the SLEC, Administrative sanction orders will be communicated to the beneficiary / District Horticulture Officer concerned.
- The beneficiary should submit the certificate consisting of Non-Submergence of that particular survey no of the land where the nursery is proposed to be taken up.
- The Large Nursery shall be completed within a period of one year from receipt of the administrative sanction orders otherwise sanction orders shall be deemed to be cancelled and concerned District officers shall be held personally responsible.
- The beneficiary/Institution shall follow the rules and regulations of nursery act 2017, Telangana State.
- Stage wise photos (i.e, before, during and after the completion of work) should be recorded before release of payment.
- The subsidy amount will be released in two equal instalments i.e., 1$^{st}$ instalment will be released basing on the recommendation of the DHSO after completion of 50% of the works and 2$^{nd}$ instalment will be released after the physical verification of the nursery, scrutiny and verification of the vouchers towards the

expenditure incurred by the beneficiary and recommendation of the Joint Technical Team for release of subsidy and submission of proposal by the DHSO to NHB for accreditation under copy marked to Mission Director. Then only 2nd installment release will be considered.

- A joint inspection by a team consisting of DHSO, HO concerned, Sr. Officer from Head Office & a Scientist from SKLTGHU is mandatory for release of 2nd installment.
- Accreditation of the nursery is mandatory. The 2nd installment subsidy shall be released only after submission of proposal for NHB for accreditation.
- The concerned District officers are requested to furnish monthly progress on implementation of the unit as per terms and conditions.
- The DHSO shall report any misuse /discrepancy immediately.
- All the components which are proposed for development of nurseries are mandatory for release of subsidy.

**List of documents to be submitted by the applicant for Establishment of Nurseries under Private Sector:**

- Application form with full details with latest photograph of the applicant.
- Land records (Pattadar pass book / pahani given by MRO)
- Soil and Water analysis reports.
- The proposed infrastructure for obtaining the subsidy along with the estimates as per the guidelines (Project proposal).
- Progeny / scion block is mandatory.
- Estimates of civil structures – Prepared by any State Government Engineering Depts.
- The video and photographs of the farm should be produced to the department by the beneficiary before and after the establishment of nursery.
- Annual plan for the production of plant material species-wise has to be submitted to Mission Director / DMC. Monthly progress report to be submitted by the farmer to DMC / SHM.

**i. Upgrading nursery infrastructure to meet accreditation norms:**

**Total Unit Cost: Rs. 10.00 lakh/nursery of 2 ha**

100% assistance will be provided to public sector and 50% of cost to private sector subject to a maximum of Rs. 10.00 lakh/nursery (2 Ha.). The infrastructure facilities will include establishment of:

1. Hot bed sterilization of media, Working shed, Virus indexing facility (for citrus & apple), Hardening chamber/net house, Mist chamber, Establishment of Mother Block, Irrigation and fertigation facility/unit.
2. The subsidy will be worked out on prorata basis.

## INFRASTRUCTURE PROPOSED FOR UPGRADING NURSERY INFRASTRUCTURE TO MEET ACCREDITATION NORMS

| Sl. No | Name of the component |
|---|---|
| 1 | Hot bed sterilization of media |
| 2 | Working shed 10x10x10 feet |
| 3 | Virus indexing facility |
| 4 | Hardening chamber |
| 5 | Mist chamber |
| 6 | Establishment of scion block (1.50 Acre) required crop wise, variety wise plant material will be procured from Research Station only. |
| 7 | Installation of drip irrigation for new scion block or orchards and fertigation |
| 8 | Water Harvesting system for storage of water in 20mx20mx3m ponds/tube wells/dug wells @ Rs.100 cubic meters / Water Storage tank (Capacity 2.0 lakhs litre capacity) |
| 9 | Fencing if required |
| 10 | Others if any |

- All the components which are proposed for upgrading of nursery infrastructure to meet accreditation norms are mandatory for release of subsidy.
- Visit of DHSO & Technical team to the nursery is must.
- Beneficiaries should take steps to get NHB Accreditation & Rating compulsorily within 18 months of receiving the subsidy to check the quality of transplants / saplings produced in the plantation.

## iii.ESTABLISHMENT OF SEED INFRASTRUCTURE/SEED PROCESSING UNIT

**Objective:**

To handle, process, packing, storage etc., of seeds meant for use as seed material for cultivation of horticulture crops. The assistance shall be provided for creating infrastructure like drying platforms, storage bins, packaging unit and related equipment's. Production of quality seed and uplifting material including handling, processing, packing, storage for identified horticulture crops.

**Total Unit Cost: Rs. 300.00 lakhs**

100% of cost to public sector and in case of private sector, credit linked back subsidy @ 50% of cost of project.

**List of Documents to be submitted by the applicants for Establishment of Seed Processing Unit.**

| | |
|---|---|
| 1 | Application form of the applicant/promoters |
| 2 | Basic data sheet with complete technical specifications. |
| 3 | Detailed project report as per MIDH guidelines. |
| 4 | Partnership deed |
| 5 | Firm Registration certificate/certificate of Incorporation |
| 6 | Bank sanction letter along with appraisal report. |
| 7 | Approval from Gram Panchayat/Municipality /corporation. |
| 8 | Approval from Pollution Control Board Acknowledgement |
| 9 | SSI Registration certificate |
| 10 | Fire Department approval with drawings |
| 11 | Pan card taken on company name (Xerox copy). |
| 12 | Electricity approval |
| 13 | KYC documents of all the partners |
| 14 | VAT/GST Registrations. |
| 15 | Land conversion. (for one acre only) |
| 16 | DHM approval (District Collector) |
| 17 | Affidavit |
| 18 | Land documents (sale deed / Lease deed Agreement) for 10 years along with certificate issued by Tahsildar / Panchayat Secretary for proof of land |
| 19 | Land records (Pattadar pass book / pahani given by MRO). |
| 20 | The proposed infrastructure for obtaining the subsidy along with the estimates as per the guidelines (Project). |
| 21 | Estimates of civil structures – Prepared by any State Government Engineering Depts. |
| 22 | Crops and varieties proposed to be processed under Seed Infrastructure Unit & whether the seeds are Open Pollinated/Hybrid/ Breeder/F1/F2 & Sources of Seed/line & Name of Certification Agency |
| 23 | Charted Account certificate (certifying the beneficiary contribution & component wise expenditure) |
| 24 | Insurance copy of the unit |
| 25 | Soil Testing report |
| 26 | Water Testing report |

- The beneficiary has to establish the proposed infrastructure with total cost of Rs.300.00 lakhs as per the operational guidelines of MIDH.
- The beneficiary has to produce the standard quality plant material.
- Machinery space & storage space may be kept in view in Seed Infrastructure projects.
- The Capacity of the unit shall be 4 MTs per hour.

**Terms & Conditions:**

The beneficiaries shall apply to DHSOs in the prescribed format along with the Pattadar Passbook or Lease Agreement document executed for 15 years along with the certificate issued by Tahsildar / Panchayat Secretary for proof of land.

- The beneficiary shall also enclose the water & soil analysis report from the approved lab.
- The beneficiary shall also enclose the bank consent for release of loan amount for establishment of nursery under credit linked back-ended subsidy.
- After the inspection of the site by the concerned H.O. and DHSO, the proposal with the recommendations will be placed before the District Level Executive Committee for sanction of the proposals for Seed Processing Unit.
- After consideration by the District Mission Committee or District collector the same will be forwarded to O/o State Horticulture Mission.
- The same proposal will be placed before the State Level Executive Committee for sanction of the proposals.
- After consideration by the State Level Executive committee of State Horticulture Mission, the same will be sent to NHM, for approval in Empowered Committee Meeting, New Delhi.
- After approval by the SLEC meeting administrative sanction orders will be communicated to the beneficiary / District Officer concerned and to the Bank which is providing the loan amount i.e. 50% of project cost.
- The subsidy amount will be released in two equal installments i.e., 1$^{st}$ installment will be released after completion of 50% of the works and 2$^{nd}$ installment will be released after establishment of Seed Processing Unit and after physical verification of the Seed Processing Unit by the District Officer / Technical Teams.
- The payment of back-ended subsidy shall be made in 2 installments. First installment shall be released after receiving satisfactory Joint Inspection Report (JIT) report of completion of civil works and installation of machinery/equipment as per technical standards. The second installment shall be released by SHM after receiving satisfactory JIT report for project completion and commencement of commercial production. The Joint

Inspection Team shall comprise of members from DHSO, HO Concerned, lending bank, technical expert (TSG member), Sr. Officer from Head office and representative from 3rd party.

- The promoter / DHSO/ Banker shall scrupulously follow the terms & conditions communicated in the administrative sanction proceedings & release proceedings.
- Cost Break up for Establishment **of Seed Processing Unit**

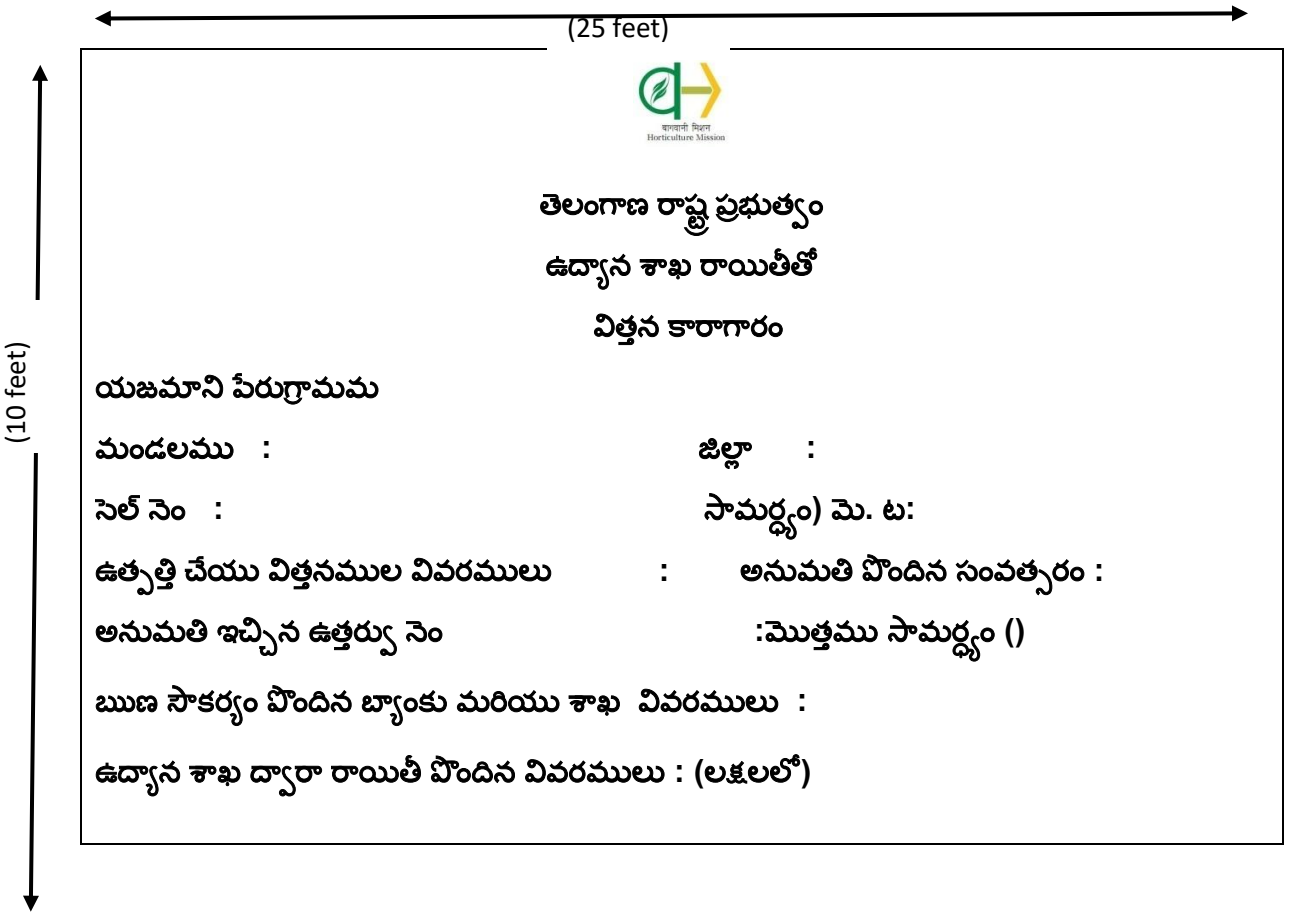
| S.No | Description | Indicative Percentage (%) | Max. Amount (Rs. in lakhs) |
|---|---|---|---|
| 1 | Civil Works | 45-50 | 143.00 |
| 2 | Plant & Machinery | 40-45 | 131.00 |
| 3 | Electrical & Other Items | 5-10 | 26.00 |
| | **TOTAL** | | **300.00** |

**Terms & Conditions:**

1. The project shall have clear cut backward linkages.
2. The promoter shall ensure that, Seed Processing Unit/ project shall be as per technical standards stipulated by the Department.
3. The project shall be implemented within a period of one year from the date of administrative sanction.
4. The farmer/entrepreneur shall inform the completion of the project to the concerned DHSO in writing along with photographs.
5. The committee as nominated by Mission Director & Director of Horticulture and as per norms of MIDH shall inspect the project in the presence of Promoter and submit the joint inspection report in the prescribed format along with the enclosures therein.
6. The subsidy is purely credit linked and back-ended.
7. The payment of back-ended subsidy shall be made in 2 installments. First installment shall be released after receiving satisfactory Joint Inspection Team (JIT) report of completion of civil works and installation of machinery/equipment as per technical standards. The second installment shall be released by SHMs after receiving satisfactory JIT report for project completion and commencement of commercial production. The Joint Inspection Team shall comprise of members from lending bank, technical expert, SHM and District Administration.
8. The project has to be successfully completed according to the terms and conditions of the loan / as per the approved feasibility-cum-project report, as per technical standards prescribed by the MIDH. The release of subsidy is subject to the strength of the joint inspection report, norms, term loan etc. and as per the availability of funds.

9. The promoter shall not claim subsidy from any other Government agency for the same unit. The Department shall initiate recovery proceedings under RR Act, if there is any deviation to this condition.
10. Tending Bank shall submit to State Horticulture Mission the utilization certificate of the subsidy released by State Horticulture Mission after utilization of subsidy released.
11. The subsidy assistance released by State Horticulture Mission to Bank shall be kept under separate head “subsidy reserve account with a tenure not less than 3 years”. The adjustment of subsidy shall be on the pattern of back ended subsidy wherein the full project cost including the subsidy amount but excluding the margin money contribution from beneficiary shall be disbursed as loan by the banks. The repayment schedule shall be drawn on the loan amount in such a way that the subsidy amount is adjusted after the bank term loan portion (excluding subsidy) is liquidated.
12. The subsidy admissible to the borrower under the scheme shall be kept in the subsidy reserve fund A/c – borrower – wise in the books of the concerned financing bank. No interest shall be applied on subsidy portion by the bank. The balance lying to the credit of the subsidy reserve fund A/c shall not form part of demand and time liabilities for the purpose of SLR/CRR. Instructions issued by the RBI from time to time shall be followed.
13. The concerned banker shall send the Bank Statement of the firm at every six months to the DHSO concerned and if the unit is cancelled for any reasons thereof within the stipulated time, (minimum 10 years) after receipt of total subsidy amount from the Department the banker shall return the amount to State Horticulture Mission.
14. The release of subsidy is subject to CA certificate, valuation report, actual expenditure, receipts & inspection etc.,
15. In case if the Bank declares the term loan account as NP due to non-payment of loan by the borrower or the project turning non- performing assets during term loan re-payment period shall make the firm/promoter in-eligible for getting back ended subsidy and the same is liable to be refunded by the concerned bank to SHM account.
16. If the promoter intends to dispose the project with in a period of 10 years, he has to repay the subsidy back to MIDH.
17. Change of Management / Proprietary ship of the project shall not be allowed without prior consent or permission of the MIDH.
18. The unit shall be utilized for the same activity for which assistance is released for the economic period of 10 years. In case, if the unit is misused for carrying on any activity other than the Horticulture activities under the scheme, the promoter /Director is liable for any action deemed fit including recovery of the assistance amount.

19. The promoter shall adhere to the advices given in the Techno Economic Viability report for release of subsidy.
20. Mission Director & Director of Horticulture, Telangana Hyderabad reserves the right to modify, add or delete any term/condition without assigning any reason thereof.
21. The promoter has to submit Affidavit to that effect i.e., the unit is utilized for the purpose for which it is meant and in case any kind of misuse or irregularities are observed in due course of period, the Director of Horticulture has right to recover the subsidy released. It came to notice (during 5th SLEC) that R.B.I objectioned that the loan amount has taken by the firm on the name of the farmer, but actually the loan amount was not taken by the farmer. The firm owner drawn loan amount with mis-interpretation of facts. If such cases are noticed by the Govt. authorities, criminal cases shall be filed against the culprit and the entire subsidy shall be recovered back from the Bank.
22. In case of any discrepancy/ dispute, the decision of the Mission Director & Director of Horticulture is final.
23. A board of 25 x10 feet with the logo of the MIDH shall be kept on the compound/ walls of the unit. The Logo of Mission for Integrated Development of Horticulture and the matter mentioned below shall be depicted on the board.



**Particulars of Seed Infrastructure Units (Subject to change as per field scenario)**

1. Production of quality seed material of Horticulture crops. (Details of the crop, variety should be mentioned in the DPR, Guidelines and procedure in vogue stipulated for seed production should be adhered with and should be approved with the concerned authorities).
2. Building includes, seed quality control lab, Office room, Processing unit, Godown, Threshing yard and cold storage unit for storage of Horticulture seeds.
3. **Seed processing Equipments**:
   Air screen cleaner, Special gravity separator / Spiral separator, Seed dressing unit. Weighing balance, Packaging machine, Dehumidifier, PH meter, Seed grader, heat sealer, Air conditioners (2 units with 1 cap, each), Bagging and sealing, desiccators, Digital temperature & humidity indicator, Miscellaneous including any other latest machines and equipment.
4. **Seed quality testing Equipment's:** Seed sampling and dividers like seed tries, sample storage boxes and racks, balances, purity board (5), Germinators (2), Refrigerator, Sand sterilizer, Hot air oven (2), Seed grinder, stereo binocular, Incubators, Auto clave, UV lamp, Electrophoresis unit, PCR unit, Gel documentation, Controlled seed storage, Thermometers / Temperature controlled centrifuge, Hygrometer, Power backing system (Generator/Solar), Computer with software and its accessories, Seed germination tables, purity working tables (5 Nos), Seed moisture meter, petri plates / plastic trays, Laboratory chemicals (as per requirement) Miscellaneous including any other latest machines and equipment's.

## SYNOPSIS

**1) Name of the Component:** PLANTATION INFRASTRUCTURE

**a) Sub-Component Applied for :** Seed Infrastructure Unit

**2) Title with Firm Details :**

**3) Purpose :**

**4) Name of the Proprietor/ Promoter/:**

**Partnership/ Pvt. Ltd. Company/Society**

**5) Details of Project Cost:**

a) Bank Term Loan **:** Rs. Lakhs

b) Other Loan **:** Rs. Lakhs

c) Capital **:** Rs. Lakhs

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**Total Project Cost : Rs. Lakhs**

---

**6) Status of the Project:**

a) Completed/ Under Construction **:**

b) If Under Construction Stage :

Date of Commencement **:**

Probable date/ month of completion**:**

**7) Breakup of the Project Cost:**

a) Civil Works **:** Rs. Lakhs

b) Plant & Machinery & Other **:** Rs. Lakhs

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**Total : Rs. Lakhs**

---

**8) Joint Inspection Photos :**

**9) Details of Estimated Cost & Subsidy as Per MIDH Norms:**

a) Estimated cost **:** Rs. Lakhs /Unit

b) Subsidy **:** Credit linked back ended subsidy @ 50% of the capital cost i.e., Rs.150.00 Lakhs/Unit.

**Signature of the Promoter** **Signature of the Banker**

**Signature of the HO** **Signature of the DHSO**

**Format – I**

## Preliminary Inspection Report
**(To be submitted along with project proposal to State MIDH Cell)**

Date of Inspection:

| | | | |
|---|---|---|---|
| A | Component | : | |
| B | **Details of Project**<br>(i) Name of the project<br>(ii) Address for communication with telephone No. | :<br>:<br>: | |
| C | **Project Location with Address**<br>(i). Survey No<br>(ii). Village<br>(iii). Mandal | :<br>:<br>:<br>: | |
| D | Constitution | : | Individual/Partnership Firm/ Company. |
| E | Proposed Activity | : | |
| F | Name of the Promoter | : | |
| G | **Present physical status of the project:**<br>I. Construction started or not<br>(i) Land development status/boundary/road<br>(ii) Connecting road to the plot<br>(iii) Stage of Seed infrastructure Unit building civil/pre-engineered as on inspection date<br>(iv) Type of seeds to be Processed | :<br>:<br>:<br>:<br>: | |

**Certificates:**

This is to certify that the promoter has submitted project proposal along with DPR and all relevant documents for Establishment of Seed processing unit. The project proposal is as per the norms of MIDH and recommended for placing in SLEC for approval.

**Signature of the Promoter** **Signature of the Banker**

**Signature of the HO** **Signature of the DHSO**

**Format – II**

## COMPONENT WISE RELEASES MADE BY THE BANKER FOR SEED INFRASTRUCTURE UNIT FOR RELEASE OF 1ST INSTALLMENT

Name of the Firm **:**

District **:**

Village & Mandal **:**

Bank & Branch :

Subsidy Account No & IFSC Code**:**

| Sl. No. | Particulars | Project Cost | | Actual investment | | Remarks |
|---|---|---|---|---|---|---|
| | | As per project report | As appraised by Banker | Loan amount released by Banker | Promoters Margin money | |
| ***1*** | ***2*** | ***3*** | ***4*** | ***5*** | ***6*** | ***7*** |
| 1. | Cost on Land | | | | | |
| 2. | Civil Works | | | | | |
| 3. | Cost on Building | | | | | |
| 4. | Cost on Plant & Machinery | | | | | |
| | **Total:** | | | | | |

Bank Manager /
Representative
(Field Officer)
With Seal

**Format –III**

**FORMAT FOR JOINT INSPECTION FOR RELEASE OF 1ST INSTALLMENT SUBSIDY UNDER MIDH, TELANGANA.**

**Name of the Unit:**
**Village & Mandal:**
**District:**
**Capacity of the unit:**
**Name of the Vegetable seeds to be processed:**

| Sl. No. | Particulars | Project Cost | | Actual investment | | Re marks |
|---|---|---|---|---|---|---|
| | | As per project report | As appraised by Banker | Loan amount released by Banker | Promoters Margin money | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **I.** | **Means of Finance** | | | | | |
| 1. | Capital | | | | | |
| 2. | Term Loan from Bank | | | | | |
| 3. | Subsidy / Margin Money / Un-Secured Loans | | | | | |
| | Total: | | | | | |
| **II.** | **Assessment** | | | | | |
| 1. | Cost on Land | | | | | |
| 2. | Cost on Building | | | | | |
| 3. | Cost on Plant & Machinery | | | | | |
| | Total: | | | | | |

**Certificates:**

1. This is to certify that the promoter has established Seed Infrastructure Unit as per the norms of the MIDH. The promoter has followed all the terms & conditions mentioned in the administrative sanction.
2. This is to certify that the promoter has fulfilled all the observations made in the Techno Economic Viability Report (TEVR). The civil works and installation of machinery/equipment as per technical standards were completed.
3. This is to certify that the project is eligible to avail subsidy of Rs. ----------.
4. An amount of Rs._____ is recommended to release towards 1st installment to the subsidy reserve fund account bearing No: ----------, IFSC Code:……., Bank:----------, Branch:----------.

**Promoter HO DHSO Sr. Officer from Head Office**

**Member from NABCONS Banker TSG/Scientist from DATT Centre**

**Format –IV**

## FORMAT FOR SUBSIDY CALCULATION SHEET
## (To be submitted for release of 1st instalment subsidy)

Name of the Seed Processing Unit:

**Capacity of the Unit :**

**Unit-I**

| Particulars | Length in FT | Width in FT | Total Area in S.Ft | Cost |
|---|---|---|---|---|
| Land Cost | | | | |
| A. Ground Floor | | | | |
| Less- Machine Room | | | | |
| Net Volume | | | | |
| B. First Floor | | | | |
| Less Machine Room | | | | |
| New Volume | | | | |
| C. Total Area (A+B) | | | | |
| D. Plant & Machinery | | | | |
| i. Seed Germination, GOT & Pathology Testing | | | | |
| ii. Seed Extraction & Processing | | | | |
| iii. Seeds Storage | | | | |
| iv. Seeds Treating /Coating | | | | |
| v. Seeds Weighing, Packing & Printing | | | | |
| Vi. Office Furniture, Computers & Miscellaneous | | | | |
| E. R & D Farm as other fixed assets | | | | |
| F. Licensing works like agriculture dept, Pollution CFE & CFO, Fire dept NOC, DSIR Reconginsation, etc., as Pre-Operative expenditure | | | | |
| G. Working capital | | | | |
| Total Cost of the project | Lakh | | | |
| Total Eligible subsidy | 50 % of the Project cost | | | |
| (50% of cost) | | | | |

**Certificates:**

1. This is to certify that the promoter has established Seed Infrastructure Unit as per the norms of the MIDH. The promoter has followed all the terms & conditions mentioned in the administrative sanction.

2. This is to certify that the promoter has fulfilled all the observations made in the Techno Economic Viability Report (TEVR). The civil works and installation of machinery/equipment as per technical standards were completed.

3. This is to certify that the project is eligible to avail subsidy of Rs._____

4. An amount of Rs._____ is recommended to release towards 1st installment to the subsidy reserve fund account bearing No._____ IFSC Code:_____, Bank_____, Branch:_____.

**Promoter** **HO** **DHSO** **Sr. Officer from Head Office**

**Member from NABCONS** **Banker** **TSG/Scientist from DATT Centre**

**Check list for submission of release proposals towards 1st instalment**

1. Missing documents as per check list (if any) (Refer page no.12 & 13)
2. Joint inspection report in format-II, III & IV
3. Term loan account statement from lending bank.
4. Insurance certificate
5. Letter from lending bank regarding reserve fund account details.
6. CA certificate (certifying the component wise expenditure)
7. DMC Approval copy.

**Format –V**

## FORMAT FOR JOINT INSPECTION FOR RELEASE OF 2nd INSTALMENT SUBSIDY

(Project completion and commencement of commercial production of unit)

1. Name of the unit with full address :
2. Date of Administrative sanction :
3. Name of the CEO/Managing Director :
4. Present status of unit/project :
5. Components of project :

| **Name of the Component** | **Size as per DPR** | **Actual Size** |
|---|---|---|
| | | |
| | | |

6. Date of 2nd inspection of JIT members :

7. Name of the Designation of JIT member :
   a.
   b.
   c.
   d.
   e.
   f.
8. Means of Finance : (Rs. in lakhs)
9.

| **Means of Finance** | **As per DPR** | **Actual investment** |
|---|---|---|
| Promoter contribution | | |
| Term loan | | |
| Others | | |
| **Total** | | |

10. Date of start of project :
11. Date of completion of civil works and machinery installation:
12. Date of Joint inspection for 1st installment of subsidy :

13. Date of commencement of commercial production of the project :
14. Week wise/Month wise seed processing details :
15. Status of Term loan :
16. Remarks of JIT members :

**Certificate:**

1. This is to certify that the promoter has established Seed processing unit as per the Norms and MIDH guidelines.
2. This is to certify that the promoter has fulfilled all the terms and conditions laid down in administrative sanction order issued by Horticulture Department.
3. This is to certify that the project has commenced commercial production and running as per projections in DPR/TEVR.
4. The project eligible for total subsidy of Rs._____ Lakhs and Rs. _____ Lakhs is recommended as 2nd installment.

**Promoter** **Banker** **HO** **DHSO**

**TSG (Member)** **Sr. Officer from Head office** **Member from NABCONS**

**Check list for submission of release proposals towards 2nd instalment**

1. Missing documents as per check list (if any)
2. Joint inspection report in format-V
3. Term loan account statement from lending bank.
4. DMC Approval copy.
5. Month wise seed processing details from commercial start of project.

## iv. SETTING UP OF NEW TISSUE CULTURE UNIT

The future of horticulture depends not only on good agricultural practices but also on the adoption of new technologies . Biotechnology has been helpful in increasing the production and quality of horticultural crops . Tissue culture technology has been successful in plant development of horticultural crops and DNA technology has been successful in variety identification and disease detection . Similarly , biofertilizers and biocontrols have been helpful in increasing soil nutrients and preventing pests / diseases . This technology is being used To effectively implement it in horticulture development, many programs have been formulated under the Biotechnology Implementation Unit in Horticulture under the MIDH Scheme and guidelines have been given for their implementation .

- The funds from this unit can be used by Government / Non-Government Organizations / Private Institutions to build the infrastructure required for a tissue culture experimental school . For Public Sector Institutions 100 percent subsidy i.e. Rs. 250.00 lakhs is being provided and private sector institutions are being provided 40 percent subsidy i.e. Rs. 100.00 lakhs
- Pattern of assistance

| Sno. | Component | Unit Cost (Rs. in Lakhs) | Subsidy (Rs. in Lakhs) |
|---|---|---|---|
| 1 | Setting up New Tissue Culture Unit | Max. permissible Cost Rs.250.00 Lakhs | 100% assistance for public sector,<br>Credit linked back ended subsidy @ 40% of cost project. |

(Rs. in Lakh)

| Sl.No. | Component | Total Cost (Rs. in Lakh) | Subsidy (Rs. in Lakh) |
|---|---|---|---|
| **I** | **Civil works -Details** | | |
| 1 | Land development & construction of laboratory building, Other civil works. | 85 | 34 |
| 2 | Controlled condition structures for primary hardening include Poly house and secondary hardening | 35 | 14 |
| | **Subtotal** | **120** | **48** |
| **II** | **Plant and machinery equipments** | | |
| **A** | **Major Equipments** | | |
| | Autoclave machine (vertical) Autoclave machine (Horizontal), Growth Racks with electrical fittings, Bottle with caps Decontamination autoclave, Laminar Air Flows, Steam boiler, Air conditioners, Air cartons, Blade sterilizers, Positive Pressure Module | 92 | 37 |
| **B** | **Small Equipments** | | |
| | Digital ph meter, Electronic Balance, Precision Balance, Forceps & Blade Holders, Induction Stove, Ph Meter, Coarse weigh balance, Sealing machine, Hot Air Oven, Magnetic Stirrer, Motorized stirrer, Refrigerator, TDS Meter, Bottle washer, Vaccum Cleaner, Fogger (for fumigation), | 11 | 4 |
| **C** | **Minor & Miscellaneous Equipments (Consumables)** | | |
| | Pass box, Plastic and other glass wares, Plastic crates, RO Unit, Glass and utensils, Lab dresses, Trays & Trolleys, Lab interior glass partition, Computer & Accessories, Generator & others | 27 | 11 |
| **Subtotal (A+B+C)** | | **130** | **52** |
| **Grand Total** | | **250** | **100** |

**List of Documents to be submitted by the applicants for Establishment of Tissue Culture Unit.**

| | |
|---|---|
| **1** | **Application form of the applicant/promoters** |
| 2 | Basic data sheet with complete technical specifications. |
| 3 | Detailed project report as per MIDH guidelines. |
| 4 | Partnership deed |
| 5 | Firm Registration certificate/certificate of Incorporation |
| 6 | Bank sanction letter along with appraisal report. |
| 7 | Approval from Gram Panchayat/Municipality /corporation. |
| 8 | Approval from Pollution Control Board - Acknowledgement |
| 9 | SSI Registration certificate |
| 10 | Fire Department approval with drawings |
| 11 | Pan card on company name (Xerox copy). |
| 12 | Electricity approval |
| 13 | KYC documents of all the partners |
| 14 | GST Registration Certificate. |
| 15 | Land conversion certificate |
| 16 | DHM approval (District Collector) |
| 17 | Affidavit |
| 18 | Land documents (sale deed / Lease deed Agreement) for 15 years along with certificate issued by Tahsildar / Panchayat Secretary for proof of land |
| 19 | Land records (Pattadar pass book / Pahani given by MRO). |
| 20 | Estimates of civil structures certified by the Engineer |
| 21 | Crops and varieties proposed to be processed under TC CultureUnit & whether the seeds are Open Pollinated/Hybrid/ Breeder/F1/F2 &<br>Sources of Seed/line & Name of Certification Agency |
| 22 | Charted Account certificate (certifying the beneficiary contribution & component wise expenditure) |
| 23 | Insurance copy of the unit |
| 24 | NOC from NABARD/NHB/APEDA/DIC/SFC for non-availing subsidy. |

- The beneficiary has to establish the proposed infrastructure with total cost of Rs.250.00 lakhs as per the Government of India Operational guidelines of MIDH.
- The beneficiary has to process only vegetable crops.

- ❖ The beneficiaries shall apply to DHSOs in the prescribed format along with the Pattadar Passbook or Lease Agreement document executed for 15 years along with the certificate issued by Tahsildar / Panchayat Secretary for proof of land.
- ❖ The beneficiary shall enclose the **bank consent** for release of loan amount for establishment of TC Culture Unit under credit linked back-ended subsidy.
- ❖ After inspection of the site by the concerned H.O. and DHSO, the proposals with the recommendations shall be placed before the District Mission Committee (DMC) for sanction of the proposals for Establishment of TC Culture Unit.
- ❖ After consideration by the DMC approval, the same shall be forwarded to O/o State Horticulture Mission along with bank consent letter.
- ❖ The district officer has to forward 2 sets of DPR (Detailed project report) to the Head office consisting of the information regarding land particulars, electricity connection, civil structure estimations, bank consent & sanction letter etc., & enclosing the documents as per the checklist and preliminary inspection reports and DMC approval.
- ❖ The same proposal shall be placed before the State Level Executive Committee for sanction of the proposals.
- ❖ After approval by the SLEC meeting administrative sanction orders shall be communicated to the beneficiary / District Officer concerned and to the lending Bank.
- ❖ **The payment of back-ended subsidy shall be made in 2 installments. First installment shall be released after receiving satisfactory Joint Inspection Report (JIT) report of completion of civil works and installation of machinery/equipment as per technical standards. The second installment shall be released by SHM after receiving satisfactory JIT report for project completion and commencement of commercial production.** The Joint Inspection Team shall comprise of members from DHSO, HO Concerned, lending bank, technical expert (TSG member), Sr. Officer from Head office and representative from 3rd party.
- ❖ The promoter / DHSO/ Banker shall scrupulously follow the terms & conditions communicated in the administrative sanction proceedings & release proceedings.

**Terms & Conditions:**

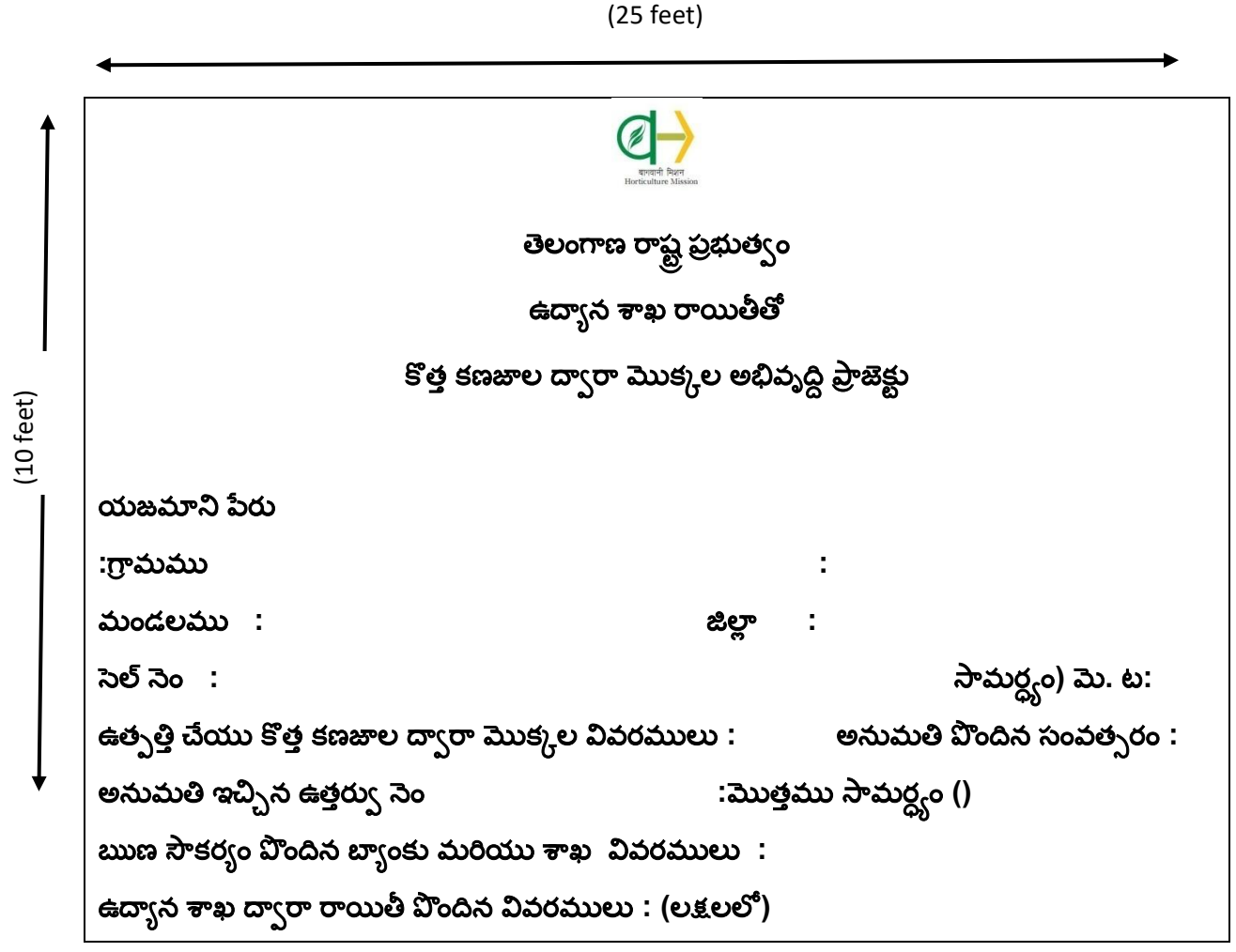
1. The project shall have clear cut backward linkages.
2. The promoter shall ensure that, TC Culture Unit/ project shall be as per technical standards stipulated by the Department.
3. The project shall be implemented within a period of one year from the date of administrative sanction.
4. The farmer/entrepreneur shall inform the completion of the project to the concerned DHSO in writing along with photographs.

5. Those interested in setting up a new tissue unit in the private sector shall have expertise in this field or shall hire staff with expertise . Provide details of the qualifications and experience of the staff to be hired
6. Details of the cost of production of each plant produced in the laboratory and the price at which the said plants are available to the farmers shall be displayed at board at TC Unit.
7. The committee as nominated by Mission Director & Director of Horticulture and as per norms of MIDH shall inspect the project in the presence of Promoter and submit the joint inspection report in the prescribed format along with the enclosures therein.
8. The subsidy is purely credit linked and back-ended.
9. The payment of back-ended subsidy shall be made in 2 installments. First installment shall be released after receiving satisfactory Joint Inspection Team (JIT) report of completion of civil works and installation of machinery/equipment as per technical standards. The second installment shall be released by SHMs after receiving satisfactory JIT report for project completion and commencement of commercial production. The Joint Inspection Team shall comprise of members from lending bank, technical expert, SHM and District Administration.
10. The project has to be successfully completed according to the terms and conditions of the loan / as per the approved feasibility-cum-project report, as per technical standards prescribed by the MIDH. The release of subsidy is subject to the strength of the joint inspection report, norms, term loan etc. and as per the availability of funds.
11. The promoter shall not claim subsidy from any other Government agency for the same unit. The Department shall initiate recovery proceedings under RR Act, if there is any deviation to this condition.
12. Tending Bank shall submit to State Horticulture Mission the utilization certificate of the subsidy released by State Horticulture Mission after utilization of subsidy released.
13. The subsidy assistance released by State Horticulture Mission to Bank shall be kept under separate head “subsidy reserve account with a tenure not less than 3 years”. The adjustment of subsidy shall be on the pattern of back ended subsidy wherein the full project cost including the subsidy amount but excluding the margin money contribution from beneficiary shall be disbursed as loan by the banks. The repayment schedule shall be drawn on the loan amount in such a way that the subsidy amount is adjusted after the bank term loan portion (excluding subsidy) is liquidated.
14. The subsidy admissible to the borrower under the scheme shall be kept in the subsidy reserve fund A/c – borrower – wise in the books of the concerned financing bank. No interest shall be applied on subsidy portion by the bank. The balance lying to the credit of the subsidy reserve fund A/c shall not form part of demand

and time liabilities for the purpose of SLR/CRR. Instructions issued by the RBI from time to time shall be followed.

15. The concerned banker shall send the Bank Statement of the firm at every six months to the DHSO concerned and if the unit is cancelled for any reasons thereof within the stipulated time, (minimum 10 years) after receipt of total subsidy amount from the Department the banker shall return the amount to State Horticulture Mission.
16. The release of subsidy is subject to CA certificate, valuation report, actual expenditure, receipts & inspection etc.,
17. In case if the Bank declares the term loan account as NP due to non-payment of loan by the borrower or the project turning non- performing assets during term loan re-payment period shall make the firm/promoter in-eligible for getting back ended subsidy and the same is liable to be refunded by the concerned bank to SHM account.
18. If the promoter intends to dispose the project with in a period of 10 years, he has to repay the subsidy back to MIDH.
19. Change of Management / Proprietary ship of the project shall not be allowed without prior consent or permission of the MIDH.
20. The unit shall be utilized for the same activity for which assistance is released for the economic period of 10 years. In case, if the unit is misused for carrying on any activity other than the Horticulture activities under the scheme, the promoter /Director is liable for any action deemed fit including recovery of the assistance amount.
21. The promoter shall adhere to the advices given in the Techno Economic Viability report for release of subsidy.
22. Mission Director & Director of Horticulture, Telangana Hyderabad reserves the right to modify, add or delete any term/condition without assigning any reason thereof.
23. The promoter has to submit Affidavit to that effect i.e., the unit is utilized for the purpose for which it is meant and in case any kind of misuse or irregularities are observed in due course of period, the Director of Horticulture has right to recover the subsidy released. It came to notice (during 5$^{th}$ SLEC) that R.B.I objectioned that the loan amount has taken by the firm on the name of the farmer, but actually the loan amount was not taken by the farmer. The firm owner drawn loan amount with mis-interpretation of facts. If such cases are noticed by the Govt. authorities, criminal cases shall be filed against the culprit and the entire subsidy shall be recovered back from the Bank.
24. In case of any discrepancy/ dispute, the decision of the Mission Director & Director of Horticulture is final.

25. A board of 25 x10 feet with the logo of the MIDH shall be kept on the compound/ walls of the unit. The Logo of Mission for Integrated Development of Horticulture and the matter mentioned below shall be depicted on the board.



## SYNOPSIS

**1) Name of the Component:** PLANTATION INFRASTRUCTURE

**a) Sub-Component Applied for :** TISSUE CULTURE Unit

**2) Title with Firm Details :**

**3) Purpose :**

**4) Name of the Proprietor/ Promoter/:**

**Partnership/ Pvt. Ltd. Company/Society**

**5) Details of Project Cost:**

a) Bank Term Loan **:** Rs. Lakhs

b) Other Loan **:** Rs. Lakhs

c) Capital **:** Rs. Lakhs

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**Total Project Cost : Rs. Lakhs**

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**6) Status of the Project:**

a) Completed/ Under Construction **:**

b) If Under Construction Stage :

Date of Commencement **:**

Probable date/ month of completion**:**

**7) Breakup of the Project Cost:**

a) Civil Works **:** Rs. Lakhs

b) Plant & Machinery & Other **:** Rs. Lakhs

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**Total : Rs. Lakhs**

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**8) Joint Inspection Photos :**

**9) Details of Estimated Cost & Subsidy as Per MIDH Norms:**

a) Estimated cost **:** Rs. Lakhs /Unit

b) Subsidy **:** Credit linked back ended subsidy @ 40% of the capital cost i.e., Rs.100.00 Lakhs/Unit.

**Signature of the Promoter** **Signature of the Banker**

**Signature of the HO** **Signature of the DHSO**

**Format – I**

## Preliminary Inspection Report
**(To be submitted along with project proposal to State MIDH Cell)**

Date of Inspection:

| | | | |
|---|---|---|---|
| A | Component | : | |
| B | **Details of Project**<br>(iii) Name of the project<br>(iv) Address for communication with telephone No. | :<br>:<br>: | |
| C | **Project Location with Address**<br>(i). Survey No<br>(ii). Village<br>(iii). Mandal | :<br>:<br>:<br>: | |
| D | Constitution | : | Individual/Partnership Firm/ Company. |
| E | Proposed Activity | : | |
| F | Name of the Promoter | : | |
| G | **Present physical status of the project:**<br>I. Construction started or not<br>(v) Land development status/boundary/road<br>(vi) Connecting road to the plot<br>(vii) Stage of Seed infrastructure Unit building civil/pre-engineered as on inspection date<br>(viii)Type of seeds to be Processed | :<br>:<br>:<br>:<br>: | |

**Certificates:**

This is to certify that the promoter has submitted project proposal along with DPR and all relevant documents for Establishment of TISSUE CULTURE unit. The project proposal is as per the norms of MIDH and recommended for placing in SLEC for approval.

**Signature of the Promoter** **Signature of the Banker**

**Signature of the HO** **Signature of the DHSO**

**Format – II**

**COMPONENT WISE RELEASES MADE BY THE BANKER FOR TISSUE CULTURTE UNIT FOR RELEASE OF 1ST INSTALLMENT**

Name of the Firm **:**

District **:**

Village & Mandal **:**

Bank & Branch :

Subsidy Account No & IFSC Code**:**

| Sl. No. | Particulars | Project Cost | | Actual investment | | Remarks |
|---|---|---|---|---|---|---|
| | | As per project report | As appraised by Banker | Loan amount released by Banker | Promoters Margin money | |
| ***1*** | ***2*** | ***3*** | ***4*** | ***5*** | ***6*** | ***7*** |
| 1. | Cost on Land | | | | | |
| 2. | Civil Works | | | | | |
| 3. | Cost on Building | | | | | |
| 4. | Cost on Plant & Machinery | | | | | |
| | **Total:** | | | | | |

Bank Manager /
Representative
(Field Officer)
With Seal

**Format –III**

**FORMAT FOR JOINT INSPECTION FOR RELEASE OF 1ST INSTALLMENT SUBSIDY UNDER MIDH, TELANGANA.**

**Name of the Unit:**
**Village & Mandal:**
**District:**
**Capacity of the unit:**

| Sl. No. | Particulars | Project Cost | | Actual investment | | Re marks |
|---|---|---|---|---|---|---|
| | | As per project report | As appraised by Banker | Loan amount released by Banker | Promoters Margin money | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **I.** | **Means of Finance** | | | | | |
| 1. | Capital | | | | | |
| 2. | Term Loan from Bank | | | | | |
| 3. | Subsidy / Margin Money / Un-Secured Loans | | | | | |
| | Total: | | | | | |
| **II.** | **Assessment** | | | | | |
| 1. | Cost on Land | | | | | |
| 2. | Cost on Building | | | | | |
| 3. | Cost on Plant & Machinery | | | | | |
| | Total: | | | | | |

**Certificates:**

5. This is to certify that the promoter has established tissue culture Unit as per the norms of the MIDH. The promoter has followed all the terms & conditions mentioned in the administrative sanction.
6. This is to certify that the promoter has fulfilled all the observations made in the Techno Economic Viability Report (TEVR). The civil works and installation of machinery/equipment as per technical standards were completed.
7. This is to certify that the project is eligible to avail subsidy of Rs. ----------.
8. An amount of Rs._____ is recommended to release towards 1st installment to the subsidy reserve fund account bearing No: ----------, IFSC Code:……., Bank:----------, Branch:----------.

**Promoter HO DHSO Sr. Officer from Head Office**

**Member from NABCONS Banker TSG/Scientist from DATT Centre**

**Format –IV**

## FORMAT FOR SUBSIDY CALCULATION SHEET
## (To be submitted for release of 1st instalment subsidy)

Name of the tissue culture Unit:

**Capacity of the Unit :**

**Unit-I**

| Particulars | Length in FT | Width in FT | Total Area in S.Ft | Cost |
|---|---|---|---|---|
| Land Cost | | | | |
| A. Ground Floor | | | | |
| Less- Machine Room | | | | |
| Net Volume | | | | |
| B. First Floor | | | | |
| Less Machine Room | | | | |
| New Volume | | | | |
| C. Total Area (A+B) | | | | |
| D. Plant & Machinery | | | | |
| i. Seed Germination, GOT & Pathology Testing | | | | |
| ii. Seed Extraction & Processing | | | | |
| iii. Seeds Storage | | | | |
| iv. Seeds Treating /Coating | | | | |
| v. Seeds Weighing, Packing & Printing | | | | |
| Vi. Office Furniture, Computers & Miscellaneous | | | | |
| E. R & D Farm as other fixed assets | | | | |
| F. Licensing works like agriculture dept, Pollution CFE & CFO, Fire dept NOC, DSIR Reconginsation, etc., as Pre-Operative expenditure | | | | |
| G. Working capital | | | | |
| Total Cost of the project | Lakh | | | |
| Total Eligible subsidy | 50 % of the Project cost | | | |
| (50% of cost) | | | | |

**Certificates:**

5. This is to certify that the promoter has established tissue culture Unit as per the norms of the MIDH. The promoter has followed all the terms & conditions mentioned in the administrative sanction.

6. This is to certify that the promoter has fulfilled all the observations made in the Techno Economic Viability Report (TEVR). The civil works and installation of machinery/equipment as per technical standards were completed.

7. This is to certify that the project is eligible to avail subsidy of Rs._____

8. An amount of Rs._____ is recommended to release towards 1st installment to the subsidy reserve fund account bearing No._____ IFSC Code:_____, Bank_____, Branch:_____.

**Promoter** **HO** **DHSO** **Sr. Officer from Head Office**

**Member from NABCONS** **Banker** **TSG/Scientist from DATT Centre**

**Check list for submission of release proposals towards 1st instalment**

8. Missing documents as per check list (if any) (Refer page no.12 & 13)
9. Joint inspection report in format-II, III & IV
10. Term loan account statement from lending bank.
11. Insurance certificate
12. Letter from lending bank regarding reserve fund account details.
13. CA certificate (certifying the component wise expenditure)
14. DMC Approval copy.

**Format –V**

## FORMAT FOR JOINT INSPECTION FOR RELEASE OF 2nd INSTALMENT SUBSIDY

(Project completion and commencement of commercial production of unit)

1. Name of the unit with full address :
2. Date of Administrative sanction :
3. Name of the CEO/Managing Director :
4. Present status of unit/project :
5. Components of project :

| Name of the Component | Size as per DPR | Actual Size |
|---|---|---|
| | | |
| | | |

6. Date of 2nd inspection of JIT members :
7. Name of the Designation of JIT member :
   a.
   b.
   c.
   d.
   e.
   f.

8. Means of Finance : (Rs. in lakhs)

| Means of Finance | As per DPR | Actual investment |
|---|---|---|
| Promoter contribution | | |
| Term loan | | |
| Others | | |
| **Total** | | |

9. Date of start of project :
10. Date of completion of civil works and machinery installation:

11. Date of Joint inspection for 1st installment of subsidy :
12. Date of commencement of commercial production of the project :
13. Week wise/Month wise seed processing details :
14. Status of Term loan :
15. Remarks of JIT members :

**Certificate:**

1. This is to certify that the promoter has established Seed processing unit as per the Norms and MIDH guidelines.
2. This is to certify that the promoter has fulfilled all the terms and conditions laid down in administrative sanction order issued by Horticulture Department.
3. This is to certify that the project has commenced commercial production and running as per projections in DPR/TEVR.
4. The project eligible for total subsidy of Rs._____ Lakhs and Rs. _____ Lakhs is recommended as 2nd installment.

**Promoter** **Banker** **HO** **DHSO**

**TSG (Member)** **Sr. Officer from Head office** **Member from NABCONS**

**Check list for submission of release proposals towards 2nd instalment**

- ✓ Missing documents as per check list (if any)
- ✓ Joint inspection report in format-V
- ✓ Term loan account statement from lending bank.
- ✓ DMC Approval copy.
- ✓ Month wise seed processing details from commercial start of project.

## 2.ESTABLISHMENT OF NEW GARDENS

### I. AREA EXPANSION FOR FRUITS:

**Objective:**

- ✓ To bring additional areas under identified Fruit crops with improved varieties / hybrids under suitable High or Ultra high-density planting methods.

**Pattern of Assistance:**

- ➢ The assistance is 40% of admissible unit cost as per MIDH norms and shall be provided for 2 years at 60:40 ratio for 1st & 2nd years respectively. Subject to survival rate of 80% in 2nd Year (Gap filling Assistance will be provided in 2nd year).
- ➢ A beneficiary can avail maximum assistance up to 2 Ha.
- ➢ All assistance shall be disbursed to beneficiaries through Direct Benefit Transfer (DBT) Mode.

**A.Beneficiary Selection Process**

1. District Horticulture Mission ensure that Area Expansion programme to be implemented preferably on cluster approach in a contiguous area, instead of doing it in scattered & unplanned manner.
2. Minimum area per each block shall be above 10 Ha / as per allotted target in AAP for better monitoring.
3. New clusters & new beneficiaries shall be selected under these programmes as per area specific and climate specific crops.
4. The assistance under these components shall not be extended to the beneficiaries already covered during previous years subject to maximum limitation under the component. The DHSOs & HOs shall be cautious while selecting the beneficiaries.
5. Beneficiary selection must be conducted in a transparent manner . The selected list must be registered on the Suraksha portal(After on Boarding)(after on boarding) and approved by the **District Mission Committee**.

**B.Verification and Documentation**

1. Horticulture Officers of the concerned area shall obtain applications from identified beneficiaries along with photograph in the existing format prescribed.
2. The farmers who are having assured source of irrigation and power supply are only to be selected & Micro irrigation shall be integrated for better survival of plantations.
3. The farmers can apply in person or register online directly through MIDH Suraksha portal(After on Boarding)(after on boarding) (midhsuraksha.in).
4. Land holding of the farmers shall be certified by Horticulture Officers on the basis of the original Pattadar pass book signed by MRO.
5. The HO concerned shall maintain Register for recording the details of identified beneficiaries i.e., land details/crop/variety/source of plant material/ date of planting /inputs supplied/non subsidy particulars/Bank Account No. and IFSC code etc.

6. DHSO shall organize training programmes to the beneficiaries identified under Establishment of New Gardens, on all aspects of scientific Package of practices followed for concerned crops.
7. HO shall inspect 100% fields identified under his jurisdiction before sanction of the scheme and he himself shall satisfy on soil suitability and availability of water and authorized power connection before recommending. Whereas, DHSO shall inspect a minimum of 20% of the identified or sanctioned fields.
8. Integration of Area expansion with micro irrigation is mandatory.
9. Selection, documentation and Suraksha portal(After on Boarding) registration process shall be completed in a time bound manner.
10. Before permitting the beneficiaries to start land preparation, pitting etc., the DHSO shall ensure to take approval of DMC for the selected beneficiaries.
11. DHSO shall ensure proper documentation and registration in Suraksha portal(After on Boarding) Suraksha portal(After on Boarding)(after on boarding) of various stages of implementation (viz., land preparation / pitting, planting & installation of micro irrigation system etc. along with necessary photographs) by the HOs concerned.
12. Intercropping shall be encouraged in all perennial orchards with region specific intercrop as they contribute to soil fertility and income during gestation period.

**C. Supply of Plant Material:**

1. DHSO/DHM shall make advance arrangement for procurement of planting material from accredited nurseries/certified planting material/certified seeds for ensuing season. DHSO/DHM shall have a mechanism in place for the proper certification and distribution of planting material/seeds. Sourcing of planting material/seeds from ICAR institutes, SAUs, KVKs and Government Department/ CoEs is to be given priority over other sources. Area Expansion shall be restricted to availability of planting material from accredited nurseries/certified Planting Material.
2. Priority shall be given for supply of plant material from tied-up Horticultural farms / Research stations of PJTS Agril. University / SKLTS Horti. University.
3. However, farmers shall be permitted to purchase plant material from private nurseries under following circumstances.
   - ✓ Where ever farmer's choice variety is not available in tied-up Horticultural farms / Research stations.
   - ✓ In cases where short fall of plant material is identified in tied-up nurseries
   - ✓ In case of crops for which tied-up arrangement is not made.
4. In cases when plant material is supplied from Department Horticultural farms, the assistance amount towards plant material shall be directly released to the Horticultural farms by the DHSO s duly obtaining necessary bills/invoices from the farm in-charge.
5. **In case of TC Banana, the list of accredited labs with DBT, GoI under NCS -TSP shall be given to the farmers for procuring the plant material. The beneficiary shall procure the plant material by incurring full cost from T.C labs out of his**

**own choice from the approved list and assistance shall be transferred through SNA SPARSH (DBT) to the beneficiary's account**. The DHSOs shall take an affidavit from the beneficiary that, he/she has procured the planting material after perceiving about the details and credentials of the firm and is personally responsible for further consequences (if any).

6. **In cases when plant material is purchased by the farmers from Research stations or from Pvt. Nurseries, the assistance pertaining to the plant material shall be released to the farmers through DBT after submission of Bills/ invoices and uploading in Suraksha portal(After on Boarding).**

**D. Inputs like Vermi compost, FYM, Irrigation, Inter crop, Labour Charges & Implements like Gardens tools etc.,**

a) Assistance pertaining to inputs like Vermi compost, FYM, inter crop, fertilizers (organic and inorganic) and other inputs like bio fertilizer, bio-pesticides, PP chemicals, Micro nutrients etc., shall be released to the farmers through online transfer into farmers Accounts after certifying by the concerned HOs, only filing and DMC approval.

b) It is permitted to consider self- declaration from the farmers for procuring and utilization of recommended inputs (manures, fertilizers & PP chemicals) under various components like Area Expansion, Rejuvenation, etc., under MIDH for release of assistance. But it shall be ensured that the eligibility criteria and sub-component wise cost norms for inputs under various components are to be strictly adhered to.

c) The self-declaration from the farmers is to be mandatorily counter signed by the concerned Horticulture Officers and same shall be ensured by the DHSOs concerned. Further, 100% field verification by the HOs and random inspections by the DHSOs is to be scrupulously followed.

d) The self-declaration from the farmers is only considered for Land Levelling charges inputs like manures, fertilizers & PP chemicals only but not for, Plant material implements and machinery.

e) With regard to implements like Gardens tools etc., the farmers shall procure the garden tools and invoices/ bills/ vouchers are to be submitted and the subsidy shall be given to the farmers in the form of cash through online transfer into farmers Account.

**E. Training and Capacity Building**

Horticulture Officers shall organize training programmes for beneficiaries, covering the complete package of practices and advanced cultivation techniques specific to each crop.

### F. Billing and Certification

Before recommending assistance, the HO must certify the plantation bill, input supply bills, and other relevant documents.

### G. Release of Assistance

- DHSOs should thoroughly examine the documents submitted by the Horticulture Officers (HOs) to ensure that they are in accordance with the prescribed guidelines.
- After approval by the competent authority, the DHSOs shall process for the release of assistance to the beneficiaries.
- No assistance shall be paid to Nurseries/TC Labs/Input Dealers directly.

### H.Field Inspection and Monitoring

1. After the completion of plantation, HO concerned shall inspect the fields and collect all the required bills / invoices / vouchers from the concerned farmers.
2. The DHSO shall compile all the bills and obtain financial approval of DMC.
3. The district officers shall send the beneficiary list along with DMC approval to the Head office for release of Subsidy.
4. The assistance shall be provided to the beneficiaries / agency / firm after filing of all mandatory details in SURAKSHA PORTAL(AFTER ON BOARDING).

### G. Crop wise Pattern of Assistance:

| S.No | Crop | Spacing (m xm) | No of Plants per Ha. | Unit cost (Rs.) per Ha. | % of assis-tance | Subsidy in Rs. | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 1st year | 2nd year | Total |
| 1 | Banana | 1.8x1.8 | 3086 | 175000 | 40 | 42000 | 28000 | 70000 |
| 2 | Papaya | 1.8x1.8 | 3086 | 75000 | 40 | 18000 | 12000 | 30000 |
| 3 | Custard Apple | 4X4 | 1600 | 75000 | 40 | 18000 | 12000 | 30000 |
| 4 | Mango – Ultra High Density | 3x2 | 1667 | 200000 | 40 | 48000 | 32000 | 80000 |
| 5 | Mango - Ultra High Density | 4x2 | 1250 | 200000 | 40 | 48000 | 32000 | 80000 |
| 6 | Citrus - High Density | 4x3 | 832 | 200000 | 40 | 48000 | 32000 | 80000 |
| 7 | Acid Lime - High Density | 4x4.5 | 555 | 200000 | 40 | 48000 | 32000 | 80000 |
| 8 | Guava - High Density | 3x3 | 1111 | 200000 | 40 | 48000 | 32000 | 80000 |
| 9 | Pomegranate - High Density | 5x3 | 667 | 200000 | 40 | 48000 | 32000 | 80000 |
| 10 | Mango - High Density | 5x5 | 400 | 200000 | 40 | 48000 | 32000 | 80000 |

| S.No | Crop | Spacing (m xm) | No of Plants per Ha. | Unit cost (Rs.) per Ha. | % of assis-tance | Subsidy in Rs. | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 1st year | 2nd year | Total |
| 11 | Cashew – High Density | 5x5 | 400 | 150000 | 40 | 36000 | 24000 | 60000 |
| 12 | Sapota – High Density | 5x5 | 400 | 75000 | 40 | 18000 | 12000 | 30000 |
| 13 | Ber – High Density | 5x5 | 400 | 75000 | 40 | 18000 | 12000 | 30000 |
| 14 | Grape – High Density | 1.8x2.4 | 2343 | 300000 | 40 | 72000 | 48000 | 120000 |
| 15 | Pine Apple – High Density | 0.6x0.6 | 27778 | 110000 | 40 | 26400 | 17600 | 44000 |
| 16 | Mango - Regular Spacing | 7.5X7.5 | 175 | 125000 | 40 | 30000 | 20000 | 50000 |
| 17 | Citrus - Regular Spacing | 6x6 | 275 | 125000 | 40 | 30000 | 20000 | 50000 |
| 18 | Acid Lime - Regular Spacing | 6x6 | 275 | 125000 | 40 | 30000 | 20000 | 50000 |
| 19 | Guava - Regular Spacing | 6X6 | 275 | 125000 | 40 | 30000 | 20000 | 50000 |
| 20 | Pomegranate - Regular Spacing | 5x5 | 400 | 125000 | 40 | 30000 | 20000 | 50000 |
| 21 | Cashew – Regular spacing | 6x6 | 278 | 75000 | 40 | 18000 | 12000 | 30000 |

## PATTERN OF ASSISTANCE FOR MANGO (7.5 m X 7.5 m) FOR ONE HECTARE (REGULAR SPACING)

**Cost Norms: Rs.1.25 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.30 lakh/Ha** **Assistance for 2nd year: Rs.0.20 lakh/Ha**

**Spacing: 7.5m x 7.5m** **No. of plants: 175/ Ha**

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (178 No. of plants/Ha @ Rs.100 per plant) including transportation and staking. | 17800 | 3600 | 21400 | 7120 | 1440 | 8560 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 18000 | 12000 | 30000 | 7200 | 4800 | 12000 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 23000 | 18000 | 41000 | 9200 | 7200 | 16400 |
| iii | **IPM/PP Chemicals/Bio pesticides/Inter cropping** | 16200 | 16400 | 32600 | 6480 | 6560 | 13040 |
| **Total** | | **75000** | **50000** | **125000** | **30000** | **20000** | **50000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR MANGO (5 m X 5 m) FOR ONE HECTARE (HIGH DENSITY PLANTATION)

**Cost Norms: Rs.2.00 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.48 lakh/Ha** **Assistance for 2nd year: Rs.0.32 lakh/Ha**

**Spacing: 5m x 5m** **No. of plants: 400/** Ha

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (400 No. of plants/Ha @ Rs.100 per plant) including transportation and staking. | 40000 | 8000 | 48000 | 16000 | 3200 | 19200 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 23000 | 17000 | 40000 | 9200 | 6800 | 16000 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 34500 | 32500 | 67000 | 13800 | 13000 | 26800 |
| iii | **IPM/PP Chemicals/ Bio pesticides/ Inter cropping** | 22500 | 22500 | 45000 | 9000 | 9000 | 18000 |
| **Total** | | **120000** | **80000** | **200000** | **48000** | **32000** | **80000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR MANGO (3 m X 2 m) FOR ONE HECTARE (ULTRA HIGH DENSITY)

**Cost Norms: Rs.2.00 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year : Rs.0.72 lakh/H** **Assistance for 2nd year: Rs.0.48lakh/Ha**

**Spacing: 3m x 2m** **No. of plants: 1667/** Ha

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (1667 No. of plants/Ha @ Rs.100 per plant) including transportation and staking. | 166700 | 33340 | 200040 | 66680 | 13336 | 80016 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 6000 | 38000 | 44000 | 2400 | 15200 | 17600 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 4500 | 24500 | 29000 | 1800 | 9800 | 11600 |
| iii | **IPM/PP Chemicals/ Bio pesticides/Inter cropping** | 2800 | 24160 | 26960 | 1120 | 9664 | 10784 |
| **Total** | | **180000** | **120000** | **300000** | **72000** | **48000** | **120000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR MANGO (4 m X 2 m) FOR ONE HECTARE (ULTRA HIGH DENSITY)

**Cost Norms: Rs.2.00 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.72 lakh/Ha** **Assistance for 2nd year: Rs.0.48 lakh/Ha**

**Spacing: 4m x 2m**
**No. of plants: 1250/** Ha

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (1250 No. of plants/Ha @ Rs.100 per plant) including transportation and staking. | 125000 | 25000 | 150000 | 50000 | 10000 | 60000 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 21000 | 38000 | 59000 | 8400 | 15200 | 23600 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 24500 | 32500 | 57000 | 9800 | 13000 | 22800 |
| iii | **IPM/PP Chemicals/ Bio pesticides /Inter cropping** | 9500 | 24500 | 34000 | 3800 | 9800 | 13600 |
| **Total** | | **180000** | **120000** | **300000** | **72000** | **48000** | **120000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR GUAVA (3 m X 3 m) FOR ONE HECTARE (ULTRA HIGH DENSITY)

**Cost Norms: Rs.2.00 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.48 lakh/Ha** **Assistance for 2nd year : Rs.0.32 lakh/Ha**

**Spacing: 3m x 3m** **No. of plants: 1111/** Ha

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (1111 No. of plants/Ha @ Rs.50 per plant) including transportation and staking. | 55550 | 11110 | 66660 | 22220 | 4444 | 26664 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 26000 | 25000 | 51000 | 10400 | 10000 | 20400 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 21000 | 24000 | 45000 | 8400 | 9600 | 18000 |
| iii | **IPM/PP Chemicals/ Bio pesticides /Inter cropping** | 17450 | 19890 | 37340 | 6980 | 7956 | 14936 |
| **Total** | | **120000** | **80000** | **200000** | **48000** | **32000** | **80000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

**PATTERN OF ASSISTANCE FOR CITURS,ACIDLIME(6 m X 6 m) FOR ONE HECTARE (REGULAR SPACING)**

**Cost Norms: Rs.1.25 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.30 lakh/Ha** **Assistance for 2nd year: Rs.0.20 lakh/Ha**

**Spacing: 6m x 6m** **No. of plants: 278/** Ha

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (278 No. of plants/Ha @ Rs.60 per plant) including transportation and staking. | 19460 | 3892 | 23352 | 7784 | 1557 | 9341 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 25000 | 18000 | 43000 | 10000 | 7200 | 17200 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 20500 | 14500 | 35000 | 8200 | 5800 | 14000 |
| iii | **IPM/PP Chemicals/ Bio pesticides /Inter cropping** | 10040 | 13608 | 23648 | 4016 | 5443 | 9459 |
| **Total** | | **75000** | **50000** | **125000** | **30000** | **20000** | **50000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR POMEGRANATE (5 m X 3 m) FOR ONE HECTARE (REGULAR SPACING)

**Cost Norms: Rs.1.25 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.30 lakh/Ha** **Assistance for 2nd year: Rs.0.20 lakh/Ha**

**Spacing: 5m x 3m** **No. of plants: 667/** Ha

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (667 No. of plants/Ha @ Rs.60 per plant) including transportation and staking. | 40020 | 8004 | 48024 | 16008 | 3202 | 19210 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 14000 | 14000 | 28000 | 5600 | 5600 | 11200 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 10500 | 16500 | 27000 | 4200 | 6600 | 10800 |
| iii | **IPM/PP Chemicals/ Bio pesticides /Inter cropping** | 10480 | 11496 | 21976 | 4192 | 4598 | 8790 |
| **Total** | | **75000** | **50000** | **125000** | **30000** | **20000** | **50000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR CASHEW (6 m X 6 m) FOR ONE HECTARE (REGULAR SPACING)

**Cost Norms: Rs.0.75 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year : Rs.0.18 lakh/Ha** **Assistance for 2nd year : Rs.0.12 lakh/Ha**

**Spacing: 6m x 6m** **No. of plants: 278/** Ha

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (278 No. of plants/Ha @ Rs.60 per plant) including transportation and staking. | 16680 | 3336 | 20016 | 6672 | 1334 | 8006 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 10000 | 8000 | 18000 | 4000 | 3200 | 7200 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 13000 | 13500 | 26500 | 5200 | 5400 | 10600 |
| iii | **IPM/PP Chemicals/ Bio pesticides/Inter cropping** | 5320 | 5164 | 10484 | 2128 | 2066 | 4194 |
| **Total** | | **45000** | **30000** | **75000** | **18000** | **12000** | **30000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR CASHEW (5 m X 5 m) FOR ONE HECTARE (HIGH DENSITY)

**Cost Norms: Rs.1.5 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.36 lakh/Ha** **Assistance for 2nd year: Rs.0.24 lakh/Ha**

**Spacing: 5m x 5m** **No. of plants: 400/** Ha

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (400 No. of plants/Ha @ Rs.60 per plant) including transportation and staking. | 24000 | 4800 | 28800 | 9600 | 1920 | 11520 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 28000 | 18500 | 46500 | 11200 | 7400 | 18600 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 24000 | 24000 | 48000 | 9600 | 9600 | 19200 |
| iii | **IPM/PP Chemicals/ Bio pesticides/Inter cropping** | 14000 | 12700 | 26700 | 5600 | 5080 | 10680 |
| **Total** | | **90000** | **60000** | **150000** | **36000** | **24000** | **60000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR COCOA (5 m X 4 m) FOR ONE HECTARE (REGULAR SPACING)

**Cost Norms: Rs.0.75 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.18 lakhs/ Ha** **Assistance for 2nd year: Rs.0.12 lakh/Ha**

**Spacing: 5m x 4m** **No. of plants: 500/** Ha

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (500 No. of plants/Ha @ Rs.60 per plant) including transportation and staking. | 7500 | 1500 | 9000 | 3000 | 600 | 3600 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 15500 | 9000 | 24500 | 6200 | 3600 | 9800 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 15000 | 14500 | 29500 | 6000 | 5800 | 11800 |
| iii | **IPM/PP Chemicals/ Bio pesticides/Inter cropping** | 7000 | 5000 | 12000 | 2800 | 2000 | 4800 |
| **Total** | | **45000** | **30000** | **75000** | **18000** | **12000** | **30000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR CUSTARD APPLE (4 m X 4 m) FOR ONE HECTARE

**Cost Norms: Rs.0.75 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.18 lakh/Ha** **Assistance for 2nd year: Rs.0.12 lakh/Ha**

**Spacing: 4m x 4m** **No. of plants: 625/** Ha

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (667 No. of plants/Ha @ Rs.60 per plant) including transportation and staking. | 28125 | 5625 | 33750 | 11250 | 2250 | 13500 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 8000 | 5000 | 13000 | 3200 | 2000 | 5200 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 6500 | 10500 | 17000 | 2600 | 4200 | 6800 |
| iii | **IPM/PP Chemicals/ Bio pesticides /Inter cropping** | 2375 | 8875 | 11250 | 950 | 3550 | 4500 |
| **Total** | | **45000** | **30000** | **75000** | **18000** | **12000** | **30000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR SAPOTA (5 m X 5 m) FOR ONE HECTARE

**Cost Norms: Rs.0.75 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.18 lakh/Ha** **Assistance for 2nd year: Rs.0.12 lakh/Ha**

**Spacing: 5m x 5** **No. of plants: 400/** Ha

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (667 No. of plants/Ha @ Rs.60 per plant) including transportation and staking. | 18000 | 3600 | 21600 | 7200 | 1440 | 8640 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 12000 | 8000 | 20000 | 4800 | 3200 | 8000 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 9500 | 12000 | 21500 | 3800 | 4800 | 8600 |
| iii | **IPM/PP Chemicals/ Bio pesticides /Inter cropping** | 5500 | 6400 | 11900 | 2200 | 2560 | 4760 |
| **Total** | | **45000** | **30000** | **75000** | **18000** | **12000** | **30000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR BER (5 m X 5 m) FOR ONE HECTARE

**Cost Norms: Rs.0.75 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.18 lakh/Ha** **Assistance for 2nd year: Rs.0.12 lakh/Ha**

**Spacing: 5m x 5m** **No. of plants: 400/** Ha

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (667 No. of plants/Ha @ Rs.60 per plant) including transportation and staking. | 18000 | 3600 | 21600 | 7200 | 1440 | 8640 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 12000 | 8000 | 20000 | 4800 | 3200 | 8000 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 10500 | 8100 | 18600 | 4200 | 3240 | 7440 |
| iii | **IPM/PP Chemicals/ Bio pesticides /Inter cropping** | 4500 | 10300 | 14800 | 1800 | 4120 | 5920 |
| **Total** | | **45000** | **30000** | **75000** | **18000** | **12000** | **30000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR GRAPE (1.8 m X 2.4 m) FOR ONE HECTARE

**Cost Norms: Rs.3.00 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.72 lakh/Ha** **Assistance for 2nd year: Rs.0.48 lakh/Ha**

**Spacing: 1.8 m x 2.4 m** **No. of plants: 2343/** Ha.

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (3123 No. of plants/Ha @ Rs.2 per plant) including transportation and staking. | 58575 | 16875 | 75450 | 23430 | 6750 | 30180 |
| 2 | **Supporting structure** | | | | | | |
| i. | Cost of pillars | 121425 | 0 | 121425 | 48570 | 0 | 48570 |
| ii. | Cost of GI Wire, angles etc., | 0 | 103125 | 103125 | 0 | 41250 | 41250 |
| **Total** | | **180000** | **120000** | **300000** | **72000** | **48000** | **120000** |

**Note:** 1. Maximum assistance allowed to a beneficiary is up to 2 Ha
2. Required inputs should be borne by the farmer

## PATTERN OF ASSISTANCE FOR PINE APPLE (SUCKERS) FOR ONE HECTARE

**Cost Norms: Rs. 1.10 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.264 lakh/ Ha** **Assistance for 2nd year: Rs.0.176 lakh/ Ha**

**Spacing:0.6 m x 0.6 m** **No. of plants: 27778/** Ha.

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (27,778 No. of plants/Ha @ Rs.2 per plant) including transportation and staking. | 55556 | 11111 | 66667 | 22222 | 4444 | 26667 |
| 2 | **Inputs** | | | | | | 0 |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 5500 | 8000 | 13500 | 2200 | 3200 | 5400 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 3444 | 14500 | 17944 | 1378 | 5800 | 7178 |
| iii | **IPM/PP Chemicals/ Bio pesticides/Inter cropping** | 1500 | 10389 | 11889 | 600 | 4156 | 4756 |
| **Total** | | **66000** | **44000** | **110000** | **26400** | **17600** | **44000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR BANANA (TISSUE CULTURE) FOR ONE HECTARE

**Cost Norms: Rs. 1.75 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.42 lakh/Ha** **Assistance for 2nd year: Rs.0.28 lakh/Ha**

**Spacing: 1.8 m x 1.8 m** **No. of plants:3086 /Ha**

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (3086 No. of plants/Ha @ Rs.15 per plant) including transportation and staking. | 46290 | 9258 | 55548 | 18516 | 3703 | 22219 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 12000 | 15000 | 27000 | 4800 | 6000 | 10800 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 31710 | 30742 | 62452 | 12684 | 12297 | 24981 |
| iii | **IPM/PP Chemicals/ Bio pesticides /Inter cropping** | 15000 | 15000 | 30000 | 6000 | 6000 | 12000 |
| **Total** | | **105000** | **70000** | **175000** | **42000** | **28000** | **70000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR PAPAYA FOR ONE HECTARE

**Cost Norms: Rs.0.75 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.18 lakh/Ha** **Assistance for 2nd year: Rs.0.12 lakh/Ha**

**Spacing: 1.8 m x 1.8 m** **No. of plants:3086/Ha**

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (3086 No. of plants/Ha @ Rs.12 per plant) including transportation and staking. | 37032 | 7406 | 44438 | 14813 | 2962 | 17775 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 4000 | 10000 | 14000 | 1600 | 4000 | 5600 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 2000 | 7600 | 9600 | 800 | 3040 | 3840 |
| iii | **IPM/PP Chemicals/ Bio pesticides /Inter cropping** | 1968 | 4994 | 6962 | 787 | 1998 | 2785 |
| **Total** | | **45000** | **30000** | **75000** | **18000** | **12000** | **30000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## B) Area Expansion - Exotic & Niche Fruit Crops:

**MIDH - Telangana - Cost Norms and Pattern of Assistance for Exotic and Niche Fruits Crops**

| S. No | Crop | Spacing (m xm) | No. of plants per Ha | Admissible unit cost/ Ha (Rs. In Lakhs) | Percentage of assistance | Assistance/ Ha (Rs. In Lakhs) | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | 1st Yr | 2nd Yr | Total Subsidy |
| | **Exotic Crops Niche Fruits crops** | | | | | | | |
| 1 | Dragon fruit with trellis (without integration of drip irrigation) | 2.7x3 | 5000 | 6.75 | 40% | 1.62 | 1.08 | 2.7 |
| 2 | Fig (without integration of drip irrigation) | 3.5x3.5 | 772 | 1.25 | 40% | 0.3 | 0.2 | 0.5 |
| 3 | Avocado (without integration of drip irrigation) | 5x5 | 400 | 1.25 | 40% | 0.3 | 0.2 | 0.5 |
| 4 | Passion Fruit | 4x4 | 1250 | 275000 | 40 | 66000 | 44000 | 110000 |
| 5 | Strawberry | 0.9x0.45 | 25000 | 200000 | 40 | 48000 | 32000 | 80000 |
| 6 | Amla | 6x6 | 278 | 75000 | 40 | 18000 | 12000 | 30000 |
| 7 | Karonda | 4x4 | 625 | 75000 | 40 | 18000 | 12000 | 30000 |
| 8 | Jamun | 8x8 | 156 | 75000 | 40 | 18000 | 12000 | 30000 |
| 9 | Tamarind | 10x10 | 100 | 75000 | 40 | 18000 | 12000 | 30000 |
| 10 | Jack Fruit | 10x10 | 100 | 75000 | 40 | 18000 | 12000 | 30000 |
| 11 | Phalsa | 2.5x3 | 1333 | 75000 | 40 | 18000 | 12000 | 30000 |
| 12 | Garcinia | 7x7 | 204 | 75000 | 40 | 18000 | 12000 | 30000 |

1. The non-negotiables & guidelines of Area Expansion – Fruits shall be applicable for Area Expansion – Exotic & Niche Fruit crops.
2. Bund/ Boundary plantations can also be allowed in Exotic / Niche Fruit crops. In case of Bund/ Boundary plantations, the eligible area for subsidy shall be worked out on the basis of number of plants planted.

Eg: If a farmer has planted (20) Tamarind/ Jack fruit plants on Bunds/ boundaries, then the area for the purpose of subsidy shall be 0.20 Ha. as the normal density of Tamarind/ Jack fruit has been taken as 100 plants/ Ha.

## Cost norms and pattern of assistance for Area Expansion - Exotic fruit crops

**PATTERN OF ASSISTANCE FOR DRAGON FRUIT (2.7 m X 3 m) FOR ONE HECTARE**

**Cost Norms: Rs.6.75 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.1.62 lakh/Ha** **Assistance for 2nd year: Rs.1.08 lakh/Ha**

**Spacing: 2.7m x 3m** **No. of plants: 5000/Ha**

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (5000 No. of plants/Ha @ Rs.35 per plant) including transportation and staking. | 175000 | 35000 | 210000 | 70000 | 14000 | 84000 |
| 2 | **Supporting structure** (Cost of pillars) | 230000 | 0 | 230000 | 92000 | 0 | 92000 |
| 3 | **Supporting Structures** (Cost of GI Wire, tyre/ring structure etc.,) | 0 | 235000 | 235000 | 0 | 94000 | 94000 |
| **Total** | | **405000** | **270000** | **675000** | **162000** | **108000** | **270000** |

**Note:** Maximum assistance allowed to a beneficiary is up to **2 Ha** Required inputs should be borne by the farmer

## PATTERN OF ASSISTANCE FOR AVOCADO FOR ONE HECTARE

**Cost Norms: Rs.1.25 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.30 lakh/Ha** **Assistance for 2nd year: Rs.0.20 lakh/Ha**

**Spacing: 5 m x 5 m** **No. of plants: 400 /Ha**

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (400 No. of plants/Ha @ Rs.75 per plant) including transportation and staking. | 30000 | 6000 | 36000 | 12000 | 2400 | 14400 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 20000 | 18500 | 38500 | 8000 | 7400 | 15400 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 15000 | 15000 | 30000 | 6000 | 6000 | 12000 |
| iii | **IPM/PP Chemicals/ Bio pesticides /Inter cropping** | 10000 | 10500 | 20500 | 4000 | 4200 | 8200 |
| **Total** | | **75000** | **50000** | **125000** | **30000** | **20000** | **50000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR FIG FOR ONE HECTARE

**Cost Norms: Rs.1.25 lakh/ Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.30 lakh/Ha** **Assistance for 2nd year: Rs.0.20 lakh/Ha**

**Spacing: 3.5m x 3.5m** **No. of plants: 772/Ha**

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (772 No. of plants/Ha @ Rs.30 per plant) including transportation and staking. | 23160 | 4632 | 27792 | 9264 | 1853 | 11117 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 27500 | 20000 | 47500 | 11000 | 8000 | 19000 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 15000 | 15000 | 30000 | 6000 | 6000 | 12000 |
| iii | **IPM/PP Chemicals/ Bio pesticides /Inter cropping** | 9340 | 10368 | 19708 | 3736 | 4147 | 7883 |
| **Total** | | **75000** | **50000** | **125000** | **30000** | **20000** | **50000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR PASSION FRUIT (4 m X 4 m) FOR ONE HECTARE

**Cost Norms: Rs.2.75 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.66 lakh/Ha** **Assistance for 2nd year: Rs.0.44 lakh/Ha**

**Spacing: 4m x 4m** **No. of plants: 1250/** Ha

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (1250 No. of plants/Ha @ Rs.30 per plant) including transportation and staking. | 37500 | 7500 | 45000 | 15000 | 3000 | 18000 |
| 2 | **Supporting structure** (Cost of pillars) | 127500 | 0 | 127500 | 51000 | 0 | 51000 |
| 3 | **Supporting Structures** (Cost of GI Wire, angles etc.,) | 0 | 102500 | 102500 | 0 | 41000 | 41000 |
| **Total** | | **165000** | **110000** | **275000** | **66000** | **44000** | **110000** |

**Note:**Maximum assistance allowed to a beneficiary is up to 2 Ha Required inputs should be borne by the farmer

## PATTERN OF ASSISTANCE FOR STRAWBERRY FOR ONE HECTARE

**Cost Norms: Rs.2.00 lakh/Ha** **Period of Assistance: 2 year/installments**

**Assistance for 1st year: Rs.0.48 lakh/H** **Assistance for 2nd year: Rs.0.32 lakh/Ha**

**Spacing: 0.9 m x 0.45 m /Ha** **No. of plants: 25,000**

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (25,000 No. of plants/Ha @ Rs.4 per plant) including transportation and staking. | 100000 | 20000 | 120000 | 40000 | 8000 | 48000 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 10000 | 25000 | 35000 | 4000 | 10000 | 14000 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 7000 | 20000 | 27000 | 2800 | 8000 | 10800 |
| iii | **IPM/PP Chemicals/ Bio pesticides /Inter cropping** | 3000 | 15000 | 18000 | 1200 | 6000 | 7200 |
| **Total** | | **120000** | **80000** | **200000** | **48000** | **32000** | **80000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR AMLA FOR ONE HECTARE

**Cost Norms: Rs.0.75 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.18 lakh/Ha** **Assistance for 2nd year: Rs.0.12 lakh/Ha**

**Spacing: 6 m x 6 m** **No. of plants: 278/**Ha

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (278 No. of plants/Ha @ Rs.50 per plant) including transportation and staking. | 13900 | 3100 | 17000 | 5560 | 1240 | 6800 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 15000 | 13000 | 28000 | 6000 | 5200 | 11200 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 11000 | 10000 | 21000 | 4400 | 4000 | 8400 |
| iii | **IPM/PP Chemicals/ Bio pesticides /Inter cropping** | 5100 | 3900 | 9000 | 2040 | 1560 | 3600 |
| **Total** | | **45000** | **30000** | **75000** | **18000** | **12000** | **30000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR KARONDA FOR ONE HECTARE

**Cost Norms: Rs.0.75 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.18 lakh/Ha** **Assistance for 2nd year: Rs.0.12 lakh/Ha**

**Spacing: 4 m x 4 m** **No. of plants: 625 / Ha**

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (625 No. of plants/Ha @ Rs.15 per plant) including transportation and staking. | 9375 | 3100 | 12475 | 3750 | 1240 | 4990 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 17000 | 13000 | 30000 | 6800 | 5200 | 12000 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 13225 | 10000 | 23225 | 5290 | 4000 | 9290 |
| iii | **IPM/PP Chemicals/ Bio pesticides /Inter cropping** | 5400 | 3900 | 9300 | 2160 | 1560 | 3720 |
| **Total** | | **45000** | **30000** | **75000** | **18000** | **12000** | **30000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR JAMUN FOR ONE HECTARE

**Cost Norms: Rs.0.75 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.18 lakh/Ha** **Assistance for 2nd year: Rs.0.12 lakh/Ha**

**Spacing: 8 m x 8 m** **No. of plants: 156/Ha**

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (156 No. of plants/Ha @ Rs.100 per plant) including transportation and staking. | 15600 | 3100 | 18700 | 6240 | 1240 | 7480 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 17000 | 13000 | 30000 | 6800 | 5200 | 12000 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 7000 | 10000 | 17000 | 2800 | 4000 | 6800 |
| iii | **IPM/PP Chemicals/ Bio pesticides /Inter cropping** | 5400 | 3900 | 9300 | 2160 | 1560 | 3720 |
| **Total** | | **45000** | **30000** | **75000** | **18000** | **12000** | **30000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR TAMARIND FOR ONE HECTARE

**Cost Norms: Rs.0.75 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.18 lakh/Ha** **Assistance for 2nd year: Rs.0.12 lakh/Ha**

**Spacing: 10 m x10 m** **No. of plants: 100 /Ha**

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (100 No. of plants/Ha @ Rs.55 per plant) including transportation and staking. | 5500 | 1100 | 6600 | 2200 | 440 | 2640 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 22000 | 15000 | 37000 | 8800 | 6000 | 14800 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 12000 | 10000 | 22000 | 4800 | 4000 | 8800 |
| iii | **IPM/PP Chemicals/ Bio pesticides /Inter cropping** | 5500 | 3900 | 9400 | 2200 | 1560 | 3760 |
| **Total** | | **45000** | **30000** | **75000** | **18000** | **12000** | **30000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR JACKFRUIT FOR ONE HECTARE

**Cost Norms: Rs.0.75 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.18 lakh/Ha** **Assistance for 2nd year: Rs.0.12 lakh/Ha**

**Spacing: 10 m x10 m** **No. of plants: 100 / Ha**

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (100 No. of plants/Ha @ Rs.100 per plant) including transportation and staking. | 10000 | 2000 | 12000 | 4000 | 800 | 4800 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 18500 | 14000 | 32500 | 7400 | 5600 | 13000 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 12000 | 10000 | 22000 | 4800 | 4000 | 8800 |
| iii | **IPM/PP Chemicals/ Bio pesticides/Inter cropping** | 4500 | 4000 | 8500 | 1800 | 1600 | 3400 |
| **Total** | | **45000** | **30000** | **75000** | **18000** | **12000** | **30000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR PHALSA FOR ONE HECTARE

**Cost Norms: Rs.0.75 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.18 lakh/Ha** **Assistance for 2nd year: Rs.0.12 lakh/Ha**

**Spacing: 2.5 m x 3 m** **No. of plants: 1333/Ha**

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (1333 No. of plants/Ha @ Rs.25 per plant) including transportation and staking. | 33325 | 6665 | 39990 | 13330 | 2666 | 15996 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 5000 | 10000 | 15000 | 2000 | 4000 | 6000 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 5000 | 9335 | 14335 | 2000 | 3734 | 5734 |
| iii | **IPM/PP Chemicals/ Bio pesticides/Inter cropping** | 1675 | 4000 | 5675 | 670 | 1600 | 2270 |
| **Total** | | **45000** | **30000** | **75000** | **18000** | **12000** | **30000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## PATTERN OF ASSISTANCE FOR GARCINIA FOR ONE HECTARE

**Cost Norms: Rs.0.75 lakh/Ha** **Period of Assistance: 2 years**

**Assistance for 1st year: Rs.0.18 lakh/Ha** **Assistance for 2nd year: Rs.0.12 lakh/Ha**

**Spacing: 7 m x 7 m** **No. of plants: 204/**Ha

| Sl. No. | Name of the item | Unit Cost (in Rs.) | | | Assistance (in Rs.) | | |
|---|---|---|---|---|---|---|---|
| | | 1st year | 2nd year | Total | 1st year | 2nd year | Total |
| 1 | **Cost on Plant Material** (204 No. of plants/Ha @ Rs.50 per plant) including transportation and staking. | 10200 | 2040 | 12240 | 4080 | 816 | 4896 |
| 2 | **Inputs** | | | | | | |
| i | **Organic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 18000 | 14000 | 32000 | 7200 | 5600 | 12800 |
| ii | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients) | 12000 | 10000 | 22000 | 4800 | 4000 | 8800 |
| iii | **IPM/PP Chemicals/ Bio pesticides /Inter cropping** | 4800 | 3960 | 8760 | 1920 | 1584 | 3504 |
| **Total** | | **45000** | **30000** | **75000** | **18000** | **12000** | **30000** |

**Note:** Maximum assistance allowed to a beneficiary is upto **2Ha**

## C. AREA EXPANSION – VEGETABLES (HYBRID) & ONION

**Objective:**

- ✓ To ensure timely supply of vegetables all-round the year.
- ✓ To supply quality vegetables.
- ✓ To replace traditional varieties of vegetables with hybrid varieties.
- ✓ To take up Hybrid Vegetables only in identified crop colonies.

| Sl.No | Item | Max. permissible cost | Pattern of Assistance |
|---|---|---|---|
| 1 | Vegetable (Hybrid) | Rs.60,000/ Ha | 40% of the cost, maximum Rs. 24,000 per Ha. |
| 2 | Onion | Rs. 50000/ Ha. | 40% of the cost, maximum Rs. 20,000 per Ha. |

1) For Vegetables Seedlings shall be supplied to farmers on free of cost from COE Jeedimetla/Mulugu as per indent placed. In case of onion farmer,has to procure seed preferably NHRDF Seed and shall produce bills to the DHSO through HO oncerned with certification and with crop field photo, for release of assistance to farmer through DBT.
2) Subsidy amount of shall be released from head office to the SHN Section (towards COE, Jeedimetla / COE, Mulugu) for supplying of Seedlings upon submission of release proposals by DHSOs.
3) Entire expenditure as per cost norms towards transportation, labour and inputs has to be borne by the farmers.
4) The subsidy is 40% of the total admissible cost subject to a maximum of Rs. 24000 for Vegetable & Rs. 20000 for Onion. Certain components (inputs & labour charges) are considered as farmer share. The farmer has to incur expenditure as per admissible unit costs in order to avail assistance. For such components HOs/ DHSOs has to obtain bills/ invoices/ certification.
5) The DHSOs has to obtain farmer wise indents from HOs and inform to ADH of CoE concerned for supply of seedlings.
6) Concerned HOs are responsible for mobilization of seedlings from CoEs to farmer fields.

**The pattern of assistance & guidelines for Area Expansion- Vegetables (hybrid) (Tomato, Brinjal, Chillies etc ) are as mentioned below:**

**TOMATO, BRINJAL, CHILLIES etc.**

| S.No | Component | Total permissible cost per Ha. (in Rs.) | Subsidy per Ha. @ 40% | Farmer contribution |
|---|---|---|---|---|
| 1 | Seedlings | 24000 | 24000 | 0 |
| 2 | Transportation charges | 1000 | 0 | 1000 |
| 3 | Inputs (Fertilizers & Pesticides) | 35000 | 0 | 35000 |
| | **TOTAL** | **60000** | **24000** | **36000** |

**ONION**

**PATTERN OF ASSISTANCE FOR ONION FOR ONE HECTARE**

**Cost Norms: Rs.0.50 lakh/Ha** **Period of Assistance: 1 year/season**

**Assistance for 1 year/ Season : Rs.0.20 lakh/Ha**

| Sl. No. | Name of the item | Unit Cost (in Rs.) for 1st year/ Season | Assistance (in Rs.) for 1st year/ Season |
|---|---|---|---|
| **1** | **Cost on Plant Material** (Seed/ including transportation and staking. | 10000 | 4000 |
| **2** | **Inputs** | | |
| **i** | **Oragnic Manures and Fertilizers** (FYM, Neem/Castor/Groundnut Cakes/Vermicompost/Green Manure etc.,) | 8000 | 3200 |
| **ii** | **Inorganic fertilizers** (Straight/Complex/Mixed fertilizers, Water Soluble fertilizers) | 12000 | 4800 |
| **iii** | **PP Chemicals/ Bio pesticides** | 14000 | 5600 |
| **iv** | **INM/IPM and Others** (Bio fertilizers, Micro Nutrients, barrier crops, Yellow / Blue sticky traps, pheromone traps, light traps, Poison baits etc., | 6000 | 2400 |
| **Total** | | **50000** | **20000** |

**Note:** Maximum assistance allowed to a beneficiary is up to **2 Ha**

i. Subsidy shall be given to maximum 2 ha per beneficiary
ii. The DHSOs shall identify the farmers nearby surrounding the District Head Quarters or municipalities or urban local bodies.
iii. This activity preferably be taken up in cluster approach. Each cluster shall be not less than 10 ha. keeping in view of market potentiality.
iv. In case of below 1 Ha farmers the subsidy shall be admissible on pro rata basis.

v. **The subsidy is 40% of the total admissible cost subject to a maximum of Rs. 24,000 & Rs. 20,000 for per Ha Vegetables & Onion respectively and cost norms as indicated in the above tables. Though the subsidy amount is nil for certain components, the farmer has to incur expenditure as per indicted admissible unit costs in order to avail assistance. If other components are not covered, the COEs shall not get subsidy portion to full extent towards supply of seedlings.**

vi. The DHSOs shall obtain farmer wise indents from HOs and place indent to ADH of CoE concerned for supply of seedlings.

vii. The farmer shall submit the necessary bills/vouchers/ self certification towards Inputs for arranging of subsidy to the farmers accounts through DBT.

viii. The subsidy portion for seedlings component shall be released to ADH-COE, Jeedimetla / ADH-COE, Mulugu upon receipt of release proposals along with DMC approval from concerned district.

ix. The farmers are to be trained in advance on the latest technologies in cultivation aspects INM / IPM /growing of vegetables under shade nets etc. for getting higher yields / higher productivity.

x. The DHSOs are not permitted to inter change the budget allocation among the sub components and shall claim the subsidy as per the indicators given for each component.

xi. The cost involved in components like preparation of land, planting, staking, labour cost and intercultural operations shall be borne by the beneficiary.

xii. The HO concerned is responsible for proper inspection, certification of invoice, and obtaining digital photograph of farmers.

xiii. Priority shall be given to woman farmers and SHG groups.

xiv. The HO concerned shall record the data on production / productivity after adoption of latest technology in cluster by farmers.

xv. Micro irrigation is to be tied up with TSMIP wherever feasible for getting better yields.

xvi. The district officers shall send the beneficiary list along with DMC approval to the Head office, after planting for release of Subsidy after uploading the beneficiary information in Suraksha portal(After on Boarding).

## D. AREA EXPANSION FLOWERS:

| S.No | Component | Max. permissible cost (Rs.) | Pattern of Assistance |
|---|---|---|---|
| **Establishment of new gardens (Area Expansion)** | | | |
| **1** | **Flowers (For a maximum of 2 ha per beneficiary)** | | |
| **i** | Loose Flowers (Jasmine, Chrysanthemum, Crossandra, Marigold) | Rs. 50,000/ha | 40 % of the cost |
| **ii** | Bulbous and Rhizomatic Flowers,(Gladiolus, Lily, Daisy, Gerbera, Tuberose and Saffron etc.) | Rs. 2,50,000/ ha | 40 % of the cost |

**Cost Norms: i. Loose Flowers**

| S.No | Component | Total permissible Cost per Ha. (Rs.) | 40% subsidy (Rs.) |
|---|---|---|---|
| 1 | Plant Material | 30000 | 12000 |
| 2 | Inputs | 20000 | 8000d |
| | **Total** | **50000** | **20000** |

i. The non-negotiables & guidelines of Area Expansion – Fruits shall be applicable for Area Expansion – Flowers (loose).
ii. Maximum eligibility per farmer is two hectare.

**Cost Norms: ii. Bulbous and Rhizomatic Flowers**

| S.No | Component | Total permissible Cost per Ha. (Rs.) | 40% subsidy (Rs.) |
|---|---|---|---|
| 1 | Plant Material | 70000 | 28000 |
| 2 | Inputs | 180000 | 72000 |
| | **Total** | **250000** | **100000** |

**Cost Norms: ii. Rhizomatic Spices ( Ginger, Garlic & Turmeric)**

| S.No | Component | Total permissible Cost per Ha. (Rs.) | 40% subsidy (Rs.) |
|---|---|---|---|
| 1 | Plant Material | 60000 | 24000 |
| 2 | Inputs | 40000 | 16000 |
| | **Total** | **100000** | **40000** |

| S.No | Items | Particular | Cost (Rs/Ha.) | Assistance for 40% 1year |
|---|---|---|---|---|
| 1a | Plant material Seed cost | 500 kg @ 100 per Kg | 12500 | 5000 |
| 1b | Seed treatment and other pesticides | Pesticides (Granules and spray) | 7000 | 2800 |
| 2 | Inputs | | | |
| i | Fertilizers and neem cake & etc., | 8 bags of Neem cake, | 59000 | 23600 |
| | | 3 bags of vermicompost | | |
| | | 5 bags of SSP | | |
| | | 2 bags of MOP | | |
| | | 3 bags of Urea | | |
| | | 20 Kgs of Zinc | | |
| ii | INM/IPM | Integrated Pest Management and Integrated Nutreient Management | 9000 | 3600 |
| | | | | |
| iii | Pesticides and Spray | | 12500 | 5000 |
| | **Grand Total** | | **100000** | **40000** |

**All District Officers shall send information in the Annexure prescribed below for release of subsidy along with DMC approval.**

| RELEASE - ANNEXURE -1 | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S.No | COMPONENTS \Crops | Unit | Assistance (in Lakh) | Target Allotted | | No. of beneficiaries entered in Suraksha Portal | | | | Area achieved . And entered in Suraksha Portal | | | | Amount To be Released as per entry in Suraksha Portal and DMC approval (Rs.) | | | |
| | | | | PHY (Ha) | FIN (Rs in Lakhs) | Gen | SCP | TSP | Total | Gen | SCP | TSP | Total | Gen | SCP | TSP | Total |
| 1 | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |

| ANNEXURE-2 | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sl. No | No of farmers | Extent in Ha | Name of the Agency | Subsidy amount in Rs. | | | |
| | | | | Agency share | Farmer share | Transportation charges | Total |
| | | | | | | | |

**Checklist for Inspection under Area Expansion:**

| S.No | Criteria | Remarks |
|---|---|---|
| | **Area Expansion:** | |
| 1 | Application of the farmer along with photos | |
| 2 | No. of plants per Ac or Ha | |
| 3 | Source of plant material | |
| 4 | Spacing followed | |
| 5 | Photographs of orchards along with farmers before and after plantation with date & time | |
| 6 | Drip irrigation system installed in the field | Yes / No |
| 7 | Recommended input package was followed | Yes / No |
| 8 | Bills and vouchers submitted for inputs | |
| 9 | Register maintained by the HO recording the details of identified beneficiaries i.e., land details/crop/variety/source of plant material/ date of planting/ inputs applied/ non subsidy particulars/ bank account no. and IFSC code | |
| 10 | Date of approval of District Mission Committee | |
| 11 | The details of beneficiary with field photos of 3 stages. The 3 stages photos shall be clubbed and uploaded to Suraksha portal(After on Boarding) as field photo (Pit digging, during Plantation and after Plantation along with beneficiaries) | |
| 12 | Current Status of implementation of Scheme. | |

**HO** **DHSO**

## E. MUSHROOM CULTIVATION

Mushroom cultivation is a food rich in protein and vitamins and low in sugar and starch, and its cultivation has become an important industry in recent times. To popularize mushroom cultivation and its benefits among rural people, farmers, farmer women and urban dwellers, a Mushroom Development Programme has been formulated under the National Horticulture Mission Scheme with the aim of promoting and encouraging high quality spawn production, processing, marketing, infrastructure development and promotion and training programmes, and the guidelines for their implementation are given below.

1. **Mushroom production unit:**
   - ❖ Under this unit, the establishment of mushroom production centers in government/private sectors shall be encouraged. Government institutions such as agricultural universities or other educational institutions, departments and research institutes.
   - ❖ In private sectors It is mandatory to take a loan from a bank with RBI approved online banking (IFSC code, RTGS, NEFT etc.) facility for construction . A sanction letter and **appraisal letter shall** be issued regarding the loan**.** The said program is a "credit linked back ended subsidy" and a long term loan
   - ❖ If the unit does not implement the work, steps shall be taken to recover the principal and interest calculated at the interest rate charged by nationalized banks from the date of payment of the subsidy.
   - ❖ This subsidy shall be used only for the construction of buildings, infrastructure, and purchase of machinery and equipment required to set up a mushroom production unit.
   - ❖ There is no provision to cover recurring charges and staff and contingency costs of the mushroom production unit.
   - ❖ Once the mushroom production unit is fully established, it shall produce mushrooms within the stipulated time every year.
   - ❖ Organizations desirous of receiving assistance under this unit are required to furnish a letter of undertaking stating that they have not received assistance from the any other association/institution/government source for the said project.
   - ❖ The grant shall be released only after the Head of the said organization and the DHSO enter into an agreement on a stamped paper of Rs. 100/- for the above points.

| Item | Cost Norms* | Pattern of Assistance |
|---|---|---|
| **Mushroom cultivation** | | |
| (a) Production Unit | Rs. 30 lakh/unit | 100% of the cost to public sector and 40% of cost for private sector, for meeting the expenditure on infrastructure, as credit linked back ended subsidy. In the case of NE & Himalayan States, Scheduled areas, vibrant villages, Andaman & Nicobar and Lakshadweep Islands, assistance shall be @ 50% |
| (b) Spawn making unit | Rs. 20 lakh/unit | 100% of the cost to public sector and 40% of cost for private sector, for meeting the expenditure on infrastructure, as credit linked back ended subsidy. In the case of NE & Himalayan States, Scheduled areas, vibrant villages, Andaman & Nicobar and Lakshadweep Islands, assistance shall be @ 50% |
| (c) Compost making Unit | Rs. 30 lakh/unit | 100% of the cost to public sector and 40% of cost for private sector, for meeting the expenditure on infrastructure, as credit linked back ended subsidy. In the case of NE &Himalayan States, Scheduled areas, vibrant villages, Andaman & Nicobar and Lakshadweep Islands, assistance shall be @ 50%. |
| (d) Low Cost/ Small Scale mushroom production unit | Rs. 2.00 Lakhs per unit for a structure of size of 200 sqft | Assistance @ 50% per unit for meeting expenditure on infrastructure and inputs subject to a maximum of 5 units per beneficiary. |

## a) Pattern of Assistance for Production Unit

| S.no | Particular | Amount | |
|---|---|---|---|
| 1 | PUF Panel Mushroom Growing Rooms (60 x 18x 16) 2 No. with corridor | Rs. | 1400000 |
| 2 | Environmental control system (AHU) | Rs. | 1600000 |
| | **Total** | **Rs.** | **3000000** |

## b) Pattern of Assistance for Spawn Unit

| S.no | Particular | Amount | |
|---|---|---|---|
| 1 | Sterilization Room (400 sq.ft)<br>inoculation room (150 sq.mt) &<br>Incubation rooms 2no.(300 sq.ft) | Rs | 1250000 |
| 2 | Autoclave | Rs | 250000 |
| 3 | AC 2 nos. | Rs | 200000 |
| 4 | Laminar Flow Chamber | Rs | 100000 |
| 5 | Racks | Rs. | 200000 |
| | **Total** | | **2000000** |

## c) Pattern of Assistance for Compost Making Unit

| S.no | Particular | Amount | |
|---|---|---|---|
| 1 | Phase I bunker | Rs. | 266680 |
| 2 | Phase II Pasteurization tunnel | Rs. | 200000 |
| 3 | Compost Unit | Rs. | 200000 |
| 4 | Insulated Doors | Rs. | 200000 |
| 5 | Compost Tunnel Blower | Rs. | 177000 |
| 6 | Composting rack &<br>room strucutre (60' x 54' x16') | Rs. | 1189780 |
| 7 | Composting yard civil works | Rs. | 766540 |
| | **Total** | | **3000000** |

## d) Pattern of Assistance for Low cost /Small scale Mushroom Production unit

| S.no | Particular | Amount | |
|---|---|---|---|
| 1 | Incubation / cropping rooms (10' x 10'), 2no @ Rs. 50,000/- per unit | Rs. | 100000 |
| 2 | Steaming tank / Straw boiler | Rs. | 10000 |
| 3 | Chaff cutter | Rs. | 30000 |
| 4 | Racks | Rs. | 30000 |
| 5 | Humidifiers 1 no @ Rs. 10,000/- | Rs. | 10000 |
| 6 | Exhaust fans 5 no @ Rs. 3000/- | Rs. | 5000 |
| 7 | Netlons, soaking drums, 7 other Misc. | Rs. | 15000 |
| | **Total** | | **200000** |

## 3. 2nd YEAR & 3rd YEAR MAINTENANCE

### A. 2nd Year maintenance for Plantations Established during 2024-25

- **75%** of survival is mandatory for availing assistance under 2nd year maintenance.
- The beneficiaries have to take up gap filling on their own to maintain **80%** of the survival garden under 2nd year maintenance.

**PATTERN OF ASSISTANCE Per Ha. TO BE FOLLOWED FOR 2nd YEAR MAINTENANCE PROGRAMME (GARDENS ESTABLISHED DURING 2024-25)**

| Sl. No | Name of the Crop | Assistance (in Rs. per Ha.) | | |
|---|---|---|---|---|
| | | Plant Material | Inputs | Total Assistance |
| **i** | **Fruits Crops** | | | |
| 1 | T.C Banana (1.8mx1.8m) | 0 | 10246 | 10246 |
| 2 | Papaya (1.8mx1.8m) | 0 | 7500 | 7500 |
| 3 | Mango (5mx5m) | 1200 | 2080 | 3280 |
| 4 | Guava (3m x 3m) | 3336 | 2530 | 5866 |
| 5 | Pomegranate (5m x 3m) | 1670 | 3664 | 5334 |
| 6 | Citrus (6m x 6m) | 966 | 2234 | 3200 |
| 7 | Acid lime | 966 | 2234 | 3200 |
| 8 | Custard apple (4m x 4m) | 4000 | 4480 | 8480 |
| **ii** | **Exotic & Niche Crops** | | | |
| 1 | Dragon Fruit (Kamalam) | 0 | 32000 | 32000 |
| 2 | Fig (2.5m x 2.5m) | 3520 | 3120 | 6640 |
| 3 | Avocado | 3000 | 3000 | 6000 |
| 4 | Jamun | 975 | 5025 | 6000 |
| 5 | Jackfruit | 1250 | 4750 | 6000 |

### B. 3rd Year maintenance for Plantations Established during 2023-24

- **90%** of survival is mandatory for availing assistance under 3rd year maintenance.

- The beneficiaries have to take up gap filling on their own to maintain **90%** of the survival garden under 3rd year maintenance.

**PATTERN OF ASSISTANCE Per Ha. TO BE FOLLOWED FOR 3rd YEAR MAINTENANCE PROGRAMME**
**(GARDENS ESTABLISHED DURING 2023-24)**

| Sl. No | Name of the Crop | Assistance (in Rs. per Ha.) | | |
|---|---|---|---|---|
| | | Plant Material | Inputs | Total Assistance |
| **i** | **Fruits Crops** | | | |
| 1 | Mango (5mx5m) | 480 | 2800 | 3280 |
| 2 | Guava (3m x 3m) | 1332 | 4534 | 5866 |
| 3 | Pomegranate (5m x 3m) | 670 | 4664 | 5334 |
| 4 | Citrus (6m x 6m) | 392 | 2808 | 3200 |
| 5 | Acid lime | 392 | 2808 | 3200 |
| 6 | Custard apple (4m x 4m) | 1600 | 6880 | 8440 |
| **ii** | **Exotic & Niche Crops** | | | |
| 1 | Dragon Fruit (Kamalam) | 0 | 32000 | 32000 |
| 2 | Fig (2.5m x 2.5m) | 3520 | 3120 | 6640 |
| 3 | Aonla | 1875 | 3125 | 5000 |
| 4 | Jamun | 975 | 5025 | 6000 |
| 5 | Jackfruit | 1250 | 4750 | 6000 |
| 6 | Tamarind | 625 | 5375 | 6000 |

- ✓ While calculating the total cost as per the package, the subsidy amount indicated for each sub-component under IPM / INM shall be strictly followed and no diversification of funds from one input to another is allowed.
- ✓ Before extending input assistance to the beneficiaries under 2nd and 3rd year maintenance, DMC shall take necessary proactive steps so that beneficiary shall be motivated to take up gap filling on his/her own to maintain 75% and 90% survival under 2nd& 3rd year respectively.
- ✓ The district officers shall send the beneficiary list along with DMC approval to the Head office for release of Subsidy after uploading the beneficiary information in Hortnet.
- ✓ The Head office shall release the Subsidy to the farmers account directly through online.
- ✓ 100% inspections by HO is mandatory. Whereas, DHSOs shall inspect a minimum of 50% of beneficiary's fields.

**All District officers shall send information in the annexure prescribed below for release of subsidy along with DMC approval.**

| RELEASE – ANNEXURE | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S. No | COMPONENTS / CROPS | Unit | Assistance (in Lakh) | Target Allotted | | No. of beneficiaries entered in Surksha for which release is now requested | | | | Area achieved and entered in Suraksha for which release is now requested (Ha.) | | | | Amount To be Released as per entry in Suraksha and DMC approval (Rs.) | | | |
| | | | | PHY (Ha) | FIN (Rs.in Lakhs) | Gen | SCP | TSP | Total | Gen | SCP | TSP | Total | Gen | SCP | TSP | Total |
| 1 | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | |

## 4. REJUVENATION / REPLACEMENT OF SENILE PLANTATION

### A. REJUVENATION OF OLD & SENILE ORCHARDS

**Objective:**

- ✓ To increase the production and productivity of orchards of more than 15 years old rejuvenating the old and senile orchards with appropriate and integrated combination of inputs, pruning / grafting techniques.
- ✓ To regulate the shape and growth of tree.
- ✓ To Maximize the productivity with quality fruit production
- ✓ To reduce the pest and disease incidence which shall reduce the cost of cultivation of fruits crops and reduction in usage of chemical pesticides and fungicides.

**Pattern of Assistance:**

| Sl. No | Component | Max. permissible cost | Pattern of Assistance |
|---|---|---|---|
| 1 | Rejuvenation of Old / senile Gardens | Rs. 60,000/ha | 40% of the total cost subject to a maximum of Rs. 24,000/ha limited to 2 ha per beneficiary. |

| Rejuvenation/ replacement of senile plantation, canopy management | | |
|---|---|---|
| **Component** | **Total Subsidy** | **Subsidy Pattern** |
| (i) Removal of dead/dying/old plants | Rs. 10,000/ha | Assistance @ 40% in general areas for an area upto 2 ha on pro-rata basis |
| (ii) Top-working and gap filling with new plant | Rs. 10,000/ha | |
| (iii) Cost of input towards nutrient management, pest management and irrigation | Rs. 40,000/ha | |

## Non-Negotiables and Implementation Procedure for Rejuvenation:

- The beneficiary selection needs to be done in most transparent manner and the list shall invariably be approved by District Mission Committee.
- Horticulture Officers of the concerned area shall obtain applications from beneficiaries along with photograph in the existing format prescribed.
- Land holding of the farmers shall be certified by Horticulture Officers on the basis of the original Pattadar pass book.
- Photographs of orchards along with farmers before and after Rejuvenation also be maintained by the HO concerned. The same copies to be made available in the DHSO office.
- The Hos of the concerned area should verify the land and crop details of farmers and should obtain applications with the following details.

| | | | |
|---|---|---|---|
| 1 | Name of the Farmer | 8 | Age of the Garden |
| 2 | Father's / Husband's Name | 9 | Extent Proposed for Rejuvenation/ Canopy Management (Ha.) |
| 3 | Village | 10 | No. of Trees existing in the garden proposed for Rejuvenation/ Canopy Management |
| 4 | Mandal | 11 | Yield status of the crop during last year |
| 5 | Category | 12 | Recommended activity |
| 6 | Survey No. | 13 | No. of gaps identified for gap filling |
| 7 | Total Extent Ha. | 14 | No. of trees proposed for Canopy Management/ Top working or If any |

- DHSOs shall ensure to maintain the photographs (soft copies) of the beneficiary's fields before and after Rejuvenation.
- DHSOs shall organize training programmes to the beneficiaries identified under Rejuvenation on technical aspects.
- The inputs and implements have to be purchased by the farmer on his own for the implementation. The subsidy amount shall be released to the farmer on submission of bills. The subsidy amount shall be restricted to the expenditure incurred by the farmer under different sub components.
- **Purchase of implements is mandatory for rejuvenation programme without which assistance shall not be considered. However, Battery / fuel operated pruning saw is optional.**

- In case of implements, the farmers have to purchase BIS/ISI certified implements from the dealers/ distributors/ manufacturing firm but not from the local hardware shops. The necessary original invoices indicating the GST details have to be submitted to the Horticulture Officer concerned for release of subsidy.
- The HO and DHSO shall thoroughly verify and attest the bills and invoices and keep the photographs pertaining to the scheme in the office for record purpose.
- Pre-sanction inspection of the fields proposed for Rejuvenation by the Horticulture Officer concerned is mandatory and 25% of the area to be inspected by concerned DHSO.
- 100% verification of the field by the DHSO is mandatory for release of subsidy.
- Selection and documentation process shall be completed in a time bound manner and seasonality shall be adhered to, for plantation, distribution & utilization of inputs at any cost.
- The assistance shall be provided to the beneficiaries through online transfer from the State Headquarters.
- Horticulture Officer shall maintain a register for rejuvenation in which details of assistance provided under MIDH, item-wise, to be recorded.
- Rejuvenation is an integrated component and DHSOs shall strive to implement the program in totality and in holistic manner and not in bits & pieces.
- The HOs shall also collect the yield data and the impact of the rejuvenation programmes from the farmers and submit to SHM Cell through DHSO along with photographs at following stages:

    - Before taking up the rejuvenation
    - During rejuvenation (different stages)
    - Orchards in bearing conditions after rejuvenation.

- The DHSOs shall record the success stories of the rejuvenation programme in their district.

## CRITERIA FOR SELECTION OF GARDENS FOR REJUVENATION PROGRAMME

- Mango and Sweet Orange Orchards are eligible for this programme.
- Unproductive gardens.
- Senile and Non-Maintained Gardens.
- Pests & disease affected Gardens.
- Age of gardens for implementation of Rejuvenation programmes is as follows.

| S No | Crop | Age of the Garden |
|---|---|---|
| 1 | Mango | >15 years |
| 2 | Citrus | >10 years |

## CROP-WISE PARAMETERS TO BE FOLLOWED FOR REJUVENATION:

### MANGO:

1. Gap filling with suitable varieties.
2. Pruning (can be done in 3 types) :-

- Bushy trees are to be provided with proper aeration and ventilation by removal of dead, diseased, drooping & crisscross branches in case of the gardens where there is poor light penetration.
- Lanky trees with more wood have to be de-headed by way of pollarding.
- Unproductive with local varieties trees have to be top worked.

3. Application of Bordeaux paste / copper-based fungicides to the cut-ends.
4. Preparation of basins.
5. Timely application of manures (FYM/Neem-Cake/ Vermi-compost) & fertilizers as per the recommendation.
6. Thinning of the new flush keeping 4 to 5 branches covering all sides to attain dome shape to the tree.
7. Cultivation of inter-crop like Sun-hemp, Diancha etc. to improve soil fertility and to arrest weeds.
8. Plant Protection measures to be taken up as and when necessary.

**CITRUS:**

1. Removal of diseased, dead and dried branches.
2. Pruning of branches for better light penetration and air circulation.
3. Spraying of Bordeaux mixture or any copper fungicide.
4. Preparation of basins and timely application of manures (FYM/Neem-Cake / Vermicompost) and fertilizers as per recommendation.
5. Combined micro-nutrients sprays at 15 days interval on newly emerging leaves to correct the deficiencies of different elements.
6. Plant Protection measures to be taken up as and when necessary.

**Time frame for taking up rejuvenation.**

1. Mango - June - August
2. Citrus - July -September

**SUB-COMPONENT WISE PATTERN OF ASSISTANCE FOR DIFFERENT CROPS UNDER REJUVENATION IS GIVEN BELOW AND THE SAME SHALL BE FOLLOWED SCRUPULOUSLY.**

**Pattern of assistance for one hectare of Mango crop Rejuvenation**

| Sl. No. | Particulars | Admissible cost (Rs) | Assistance (Rs) |
|---|---|---|---|
| 1 | Tractor ploughing, Basin preparation, Hoeing & weeding | 3600 | 1800 |
| 2 | Farm Yard Manure | 4000 | 2000 |
| 3 | Organic Manures | | |
| i | Vermicompost / City compost | 5000 | 2500 |
| ii | De-oiled Neem Cake | 2100 | 1050 |
| 4 | Inorganic Fertilizers | 5850 | 2925 |
| 5 | Micronutrient | 5150 | 2575 |
| 6 | Plant protection chemicals | 3800 | 1900 |
| 7 | Supply of implements (1 No. Battery/ fuel operated pruning saw, 1 No. Looping shear, 2 No. Secateurs and 2 No. Folding Hand Saw compulsory) | 20500 | 9250 |
| | **TOTAL** | **60000** | **24000** |

**Pattern of assistance for one hectare of Citrus crop Rejuvenation**

| Sl. No. | Particulars | Admissible cost (Rs) | Assistance (Rs) |
|---|---|---|---|
| 1 | Basin preparation & weeding etc. | 3000 | 1500 |
| 2 | Farm Yard Manure | 4000 | 2000 |
| 3 | Organic Manures | | |
| i | Vermicompost / City compost | 5000 | 2500 |
| ii | De-oiled Neem Cake | 2100 | 1050 |
| 4 | Inorganic Fertilizers | 6600 | 3300 |
| 5 | Micronutrient | 3400 | 1700 |
| 6 | Plant protection chemicals | 5400 | 2700 |
| 7 | Supply of implements (1 No. Battery/ fuel operated pruning saw, 1 No. Looping shear, 2 No. Secateurs and 2 No. Folding Hand Saw compulsory) | 20500 | 9250 |
| | **TOTAL** | **60000** | **24000** |

**Crop wise Tentative Input Packages for Rejuvenation:**

**Name of the Crop: Mango**

| Sl.no | Recommended Inputs | Unit | Packing size | Recommended Quantity per Ha. |
|---|---|---|---|---|
| **I** | **Organic Manures** | | | |
| | Farm Yard Manure @ 50 Kgs per plant | Tones | | 5 |
| | Vermicompost / City Compost @ 10 Kgs per plant | Kgs | 40 Kg | 1000 |
| | De-Oiled Neem Cake @ 1.5 Kgs per Plant | Kgs | 40 Kg | 150 |
| **II** | **Inorganic Fertilizers** | | | |
| | S.S.P. | Kgs | 50 Kg | 300 |
| | Urea | Kgs | 50 Kg | 250 |
| | M.O.P. | Kgs | 50 Kg | 150 |
| **III** | **Micronutrients** | | | |
| | Formula – 4 | Kgs | Kg | 20 |
| | Formula – 7 | Kgs | 10 Kg | 50 |
| | 13:00:45 | Kgs | 500 gr | 5 |
| **IV** | **Plant Protection Chemicals** | | | |
| | Chlorpyriphos 20% EC | Ltrs | 500 ml | 2 |
| | Dichlorovas 76% EC | Ltrs | 500 ml | 1 |
| | Carbendazim 50% EC | Kgs | 500 gr | 1.5 |
| | C.O.C. 50% WP | Kgs | 500 gr | 1.5 |

**Name of the Crop: Citrus**

| S.No | Recommended Inputs | Unit | Packing size | Recommended Quantity per Ha. |
|---|---|---|---|---|
| **I** | **Organic Manure** | | | |
| | Farm Yard Manure @ 40 Kgs per plant | Tones | | 5 |
| | Vermicompost / City Compost @ 4 Kgs per plant | Kgs | 40 Kg | 1000 |
| | De-oiled Neem Cake @ 1/2 Kg per plant | Kgs | 50 Kg | 150 |
| **II** | **Inorganic Fertilizers** | | | |
| | S.S.P. | Kgs | 50 Kg | 625 |
| | Urea | Kgs | 50 Kg | 375 |
| | M.O.P. | Kgs | 50 Kg | 250 |
| **III** | **Micronutrients** | | | |
| | Formula – 4 | Kgs | Kg | 20 |
| **IV** | **Plant Protection Chemicals** | | | |
| | Profenophos 50% EC / Trizophos 40% EC | Ltrs | 500 ml | 1 |
| | Propergite 57% EC | Ltrs | 500 ml | 1 |
| | Metalaxyl 8% + Mancozeb 64% WP | Kgs | 500 gr | 1 |
| | C.O.C. 50% WP | Kgs | 500 gr | 1.5 |
| | Streptocyclin 10% | grms | 6 gr | 54 |
| | Sticking Agent | Ltrs | 500 ml | 2 |

## 5. CREATION OF WATER RESOURCES (FARM PONDS)

**Objective:** Farm ponds are the man-made tanks constructed for storage of water in the farmers' field during rainy season from canals, bore wells etc., and to provide lifesaving irrigation to the crops or orchards during peak / critical stages of summer to save the plants from drying up.

These are constructed by excavating the soil and depositing the earth on the banks to form bund. The HDPE geo-membrane sheet is laid in the excavated pond to arrest seepage and infiltration losses.

a. **Water Harvesting Structures for Community-Construction of on farm community tank, pond/reservoirs with use of plastic/RCC lining:**

**Cost norms / pattern of assistance for Water Harvesting Structures-Community Farm Ponds:**

| Item | Cost norms | Pattern of assistance |
|---|---|---|
| Water Harvesting Structures for Community-Construction of on farm community tank, pond/ reservoirs with use of plastic/RCC lining | **Rs. 24.00 lakh/ unit** @ Rs 80 per cubic metre in general areas and Rs 30 lakh/ per unit @ Rs 100 per cubic meter for scheduled areas for a maximum capacity of 30,000 cub mts. | Assistance @ 75% to irrigate 10 ha of command area, for a storage capacity of 30,000 cubic meter and for smaller capacity on pro-rata basis depending upon the command area either with use of minimum 500-micron plastic films or RCC/HDPE lining; owned & managed by a community/farmer group.<br><br>Cost for non-lined ponds/tanks (only in black cotton soils) will be 30% less.<br><br>Assistance will be restricted to the cost of plastic/RCC lining. However, for non MNREGA beneficiaries, assistance on entire cost including construction of pond/tank as well as lining can be availed under the scheme. |

- The community tanks, pond/ on farm water reservoir with use of plastic / RCC lining should be taken up by group of 5-10 farmers, for which farmer wise details, indicating crop etc need to be collected.
- The unit cost is Rs. 24.00 lakh in plain areas and Rs. 30.00 lakh for scheduled areas.
- The pond size shall be 100 m x 100 m x 3 m (30,000 cu m) to irrigate 10 ha of command area and for smaller capacity on pro-rata basis depending upon the command area either minimum 500 micro plastic films or RCC/HTPE lining owned and managed by a Community / Farmer group.
- Cost for non-lined ponds / tanks (only in black cotton soils) will be 30% less, and assistance will be restricted to cost of plastic / RCC lining.
  - Lining material should confirm to BIS standards.
- The BIS standards for 500 microns should be of **IS 16352:2020** other any other latest approved BIS/ISI no.)
- with Geo membrane sheet. The BIS Certificate shall be ensured from the supplier.
- The visibility of BIS marking shall be ensured before laying and during inspection.
- This programme can be done in conjunction with MGNREGS and wherever possible adequate convergence has to be ensured.
- The water bodies shall be linked with micro irrigation facility for judicious use of water.

**PROCEDURE FOR IMPLEMENTATION:**

1. Farmers cultivating horticulture crops are eligible.
2. Farmers are to be sensitized and motivated to understand the concept of farm ponds to store water in rainy season in farm ponds from bore wells, canals, runoff etc provide lifesaving irrigation to the orchards/ crops during peak periods of summer to save the gardens.
3. The Horticulture officer and MI Engineer of TSMIP have to conduct the preliminary inspection of site of identified farmer and collect the following details for assessing the feasibility (Application Form of farm / farmers inspection report of site is enclosed).

- Name of the farmer
- Father/ Husband's name
- Caste/ category of farmer i.e. SF/MF & SC/ST.

- Name of the Horticulture crop grown and its extent in Ha.
- Nature of irrigation source: whether the Bore well is functional Yes/No.
- Energization - Yes/No.
- Nature of soil suitable for excavation of farm ponds and feasibility of the site for taking up of farm ponds.

4. After inspection of the site, a digital photo may be taken along with the farmer, HO & MI Engineer at the site proposed for farm pond showing land marks in the field (Before excavation) and the techno feasibility report duly certified by HO & MI Engineer along with application of farmer is to be submitted to DHOs.
5. The DHSO should strictly follow the **SC/ST allocation** in implementation of the programme.
6. Priority should be given to the small, marginal farmers and women farmers during selection of beneficiaries.
7. After receipt of the application along with Technical feasibility report, the same shall be placed before **"District Mission Committee"** for approval.
8. Based on the approval by DMC, the administrative sanction shall be accorded, for taking up the farm pond as per the guidelines. The time limit for completion of community tanks may be indicated as **"60 days"** from the date of issue of administrative sanction.
9. The farmers have to take up excavation work, bunding and lining with plastic sheet as per specification (500 microns) / RCC lining. The farmers have to provide chain linked mesh fencing to community tanks at their own cost.
10. During field inspections / Survey, ensure transportation of excavated soil or bund formation with excavated soil resulting in extra land covered under pond.
11. The farmers should strictly follow the specifications of community tanks as given in the administration sanction.
12. The existing RCC lined community tanks and **old incomplete community tanks** are not eligible for subsidy.
13. The BIS standards for 500 microns should be of **IS 16352:2020** with Geo membrane sheet. The BIS Certificate shall be ensured from the supplier.
14. Farm ponds with a group of farmers proposed to be constructed; the DHSO should discuss with MGNREGS for convergence or get it approved by District Collector.
15. The water bodies shall be linked with **micro irrigation facility** for judicious use of water therefore the farmers having electricity connection are to be selected.

16. Micro irrigation shall be mandatory for better water use efficiency.
17. The HO/DHSO/MI Engineer shall give technical assistance to the farmer on quality of plastic sheet/ RCC proposed for lining etc. besides inspecting the community tanks from time to time for necessary technical advice.
18. MI Engineers need to be visited / inspects at least thrice during execution and technical guidance and at final stage.

a. For marking
b. During excavation / cutting of slope
c. Bund formation and trimming of banks

19. After completion of the community tanks, the farmers have to submit completion report of community tanks along with specifications to Horticulture Officer.
20. After completion of Farm pond the MI Engineer shall take the measurements and record it in the **MB Book.** If the community tanks are completed as per specification, the joint inspection team consisting farmer,HO/MI Engineer, DHSO, should inspect and recommend for subsidy based on ground reality.
21. **The size of the Community farm pond should be 100m length X 100m breadth X 3m depth. The Capacity of the farm pond is to be calculated by taking the average of top and bottom areas multiplied by depth using the formula:**

$$\frac{(L1 \times B1) + (L2 \times B2)}{2} \times \text{depth}$$

**L1 length of the top B1 breadth of the top**

**L2 length of the bottom B2 breadth of the bottom Depth 3 mts, ½ mt of free bund (Height of the bund)**

**The total volume of the farm pond should be 30000 cu.m.**

For smaller size of ponds, cost will be admissible on pro rata basis depending upon the command areas / Volume of the farm pond.

22. Before release of subsidy directly to farmers, an agreement has to be executed by farmers / farmers group on Rs.100/- stamp paper stating that “we (farmer / farmers (indicate names)) are responsible for completion of community farm ponds as per the guidelines and specifications given under MIDH, and complete the unit within prescribed period and maintenance of farm pond in future.
23. The Joint inspection committee comprising **of Farmer, HO/MI Engineer, DHSO** shall finally inspect the community tanks, verify all the bills, check & confirm the quality of the lining of farm ponds as per the standards and take digital photographs.

24. The HO/ DHSO shall ensure that the community farm pond is owned & managed by a community / farmer group.
25. Display board (Iron) of suitable size depicting the following details in Telugu version has to be erected.

**Department of Horticulture**
**Government of Telangana and MIDH GOI**

Name of the farmers:

Name of Father / Husband:

Village :

Size of farm pond :

Capacity of farm pond:

area:

Total expenditure:

Subsidy amount(Rs): year of sanction:

| S.No | Particulars | Specifications | Observations | Total Cost (Rs) in terms of earth work done | Eligible cost (Rs) | Eligible Subsidy (Rs) | Subsidy released so far | Subsidy proposed to be released | Bank details | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | | 9 | 10 | 11 |
| 1 | Pond Excavation | Measurements : Top:L1XB1 mts: | | | | | | | | |
| | | Bottom:L2XB2 mts, depth | | | | | | | | |
| 2 | Capacity in Cu Mts | (L1 x B1) + (L2 x B2) X Depth 2 | | | | | | | | |
| 3 | Cost of Sheet/RCC Lining | Geomenbrane/HDPE sheet of 500 microns (Area x rate) m x m | | | | | | | | |
| 4 | Smoothening of surfaces | No.of Mandays x rate | | | | | | | | |
| 5 | Sheet fixing charges/R | No.of Mondays x rate | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | CC Lining | | | | | | | | | |
| 6 | **Sub Total** | | | | | | | | | |
| 7 | Fencing | Cost of link mesh (wt x rate) | | | | | | | | |
| | | No.of granite poles(No x rate) | | | | | | | | |
| | | Labour Charges (No.of Mandays) | | | | | | | | |
| | **Sub Total** | | | | | | | | | |
| | **Grand Total** | | | | | | | | | |

**Joint Inspection Report for release of Assistance to Community farm pond**

**Certificates:**

- This is to certify that group of farmers have constructed farm pond as per specifications of MIDH.
- This is to certify that all the original purchase bills of the items mentioned above have been verified by the team and found correct.
- This is to certify that group of farmers were not sanctioned subsidy under Farm pond earlier.
- This is to certify that an amount of Rs. (in words Rupees ) is released as 1st and 2nd instalments.
- The balance subsidy amount of Rs. (in words Rupees ) may be released

Farmer | MI Engineer | Horticulture Officer | District Horticulture & Sericulture Officer

## b. Individual Farm Pond (20mx20mx3m) Pattern of Assistance:

| Sl. No | Item | Cost Norms | Pattern of Assistance |
|---|---|---|---|
| 1 | Water harvesting system for individuals- for storage of water in 20mx20mx3m ponds @ Rs.125/- cum, | Rs. 1.50 lakh/unit for 20mx20mx3m | 50% of cost including 300/500 micron plastic/RCC lining. For smaller size of the ponds/dug wells, cost shall be admissible on pro rata basis depending upon the command area. Maintenance shall be ensured by the beneficiary |

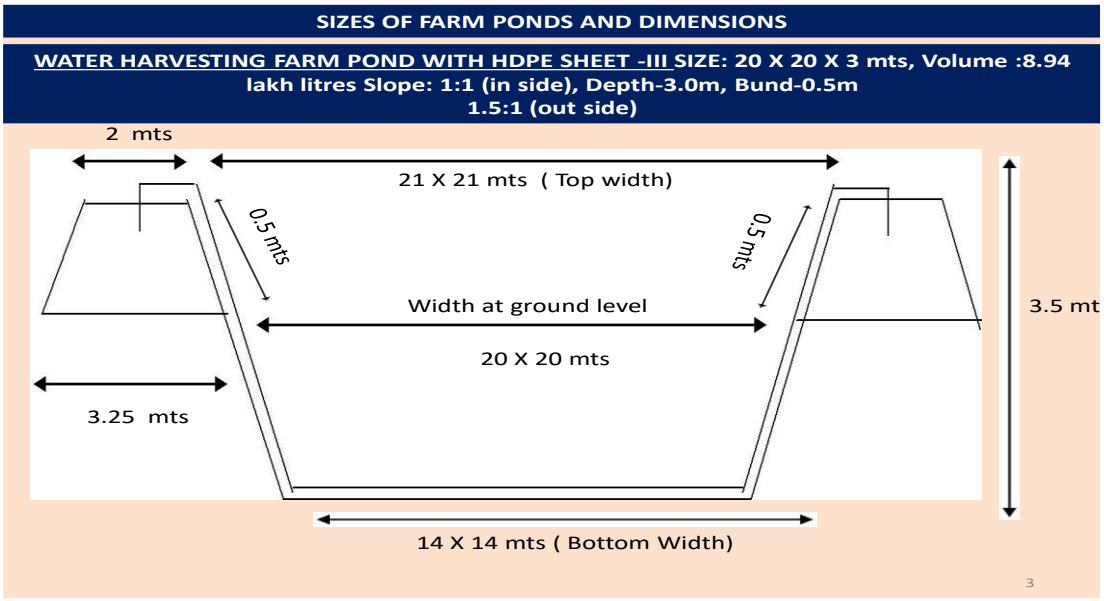
- **Individual Farm Ponds:** Assistance shall be provided for creating water source through construction of farm ponds for individuals. For smaller size of the ponds, cost shall be admissible on pro rata basis depending upon the command area. This shall also be in conjunction with MGNREGS. However, for non MGNREGS beneficiaries, assistance @ 50% of cost shall be provided including the cost of plastic / RCC lining. Lining material shall conform to BIS standards. Maintenance of the asset shall be the responsibility of beneficiary.

- The cost norms & subsidy pattern for community & Individual farm ponds based on volume is as follows:

| Sl. No | Type of Farm pond | % of subsidy | Unit cost per cubic meter volume in Rs. | Subsidy per cubic meter volume in Rs. |
|---|---|---|---|---|
| 1 | Individual | 50 | 125 | 62.5 |

- The ponds shall be provided 1.5 :1 slope.
- The DHSO/ Ho shall ensure that the command area is proportionate to the size/ volume of community farm pond proposed.
- The DHSO/HO shall ensure that, the farmer has to provide required bund area for his/her farm pond.
- The volume of the farm ponds may be worked out by the following formulae:

**20X20X3**




1. Bottom width 14 X 14m
2. Width at ground level 20 X 20m
3. Top width 21 X 21m
4. Bund above Ground level 0.5m
5. Depth below Ground level 3m
6. Bund width at top2m
7. Slope inside 1:1
8. Slope out side 1.5: 1
9. Volume = 8,94,000 lakh liters

**Calculation:**

**I. Subsidy of Farm Pond:**

$$\frac{\text{Bottom Area + Top Area}}{2} \times \text{Total Depth of the pond}$$

$$= \frac{21 \times 21 + 14 \times 14}{2} \times 3.5$$

$$= \frac{441 + 196}{2} \times 3.5$$

$$= 1114.75\ m^3$$

But as per GOI norms the total cubic meters for the size of 20X20X3 is 894 $m^3$

- One cubic meter = 1000 liters of water
- Hence, the toal volume of the farm pond is 894 X 1000 = 8,94,000 litres
- Subsidy per one cubic meter = Rs. 62.50/- ( as per GoI)
  Hence, the total subsidy is Rs.75,000/-. (as per GoI)

**A) Preparation of pit:**

- Mark out the outer corner of the selected field using pegs
- Measure the bottom dimension of the pond by calculating depth and slope ratio. It appears in center of the outer corner of the selected site and marked it excavation process.
- Excavate inner marked area first up to desired depth.
- After that, excavate rest area in inclined manner from one edge of bottom to top of the outer edge of same side and repeat the same for next three sides.
- Spread the excavated soil in the depressions for leveling and also on edges to make bunds of desired height from ground level.
- Level the excavated pond in order to suppress the angular projection.
- Cut soil shall be sealed or compacted unless the site is dug into a tight, clay formation so that film shall be saved from puncture caused by these projections.
- After compaction, the whole area of pond shall be treated with 4% atrazine (Weedicide solution) so that the plastic film shall be saved from puncture caused by root infestation.
- After that all surface of pond shall be smoothened properly.
- Excavate a trench of one cubic feet size on top of the bund at distance of 0.75-1.0 m from the inner edge of the pond for anchoring the HDPE film.

**B) HDPE (high density poly-ethylene, with carbon Black)**

This lining material shall be UV light resistant and one of the best available to last many years. It is used in lining under gasoline storage tanks, public dumps, toxic settling ponds, aquaculture ponds, etc. It can be heat-welded together. A minimum of 0.3 to 0.5 mm (500 micron) film is best suited for regular ponds.

**C) Laying of Geo Membrane sheet:**

For laying of HDPE films minimum of 0.5mm (500 micron) film are best suited for lasting of film and the following procedure are taken into consideration:

- Choose the film as per BIS /ISI mark **IS 16352:2020**, other any other latest approved BIS/ISI no.)
- Use minimum of 300/500 micron black HDPE film
- Calculate the film requirement for dugout pond and cut it accordingly
- Measure and cut the film as per calculation.
- HDPE films manufactured into panels of standard widths. Therefore, convert the film into a single sheet as desired either

mechanically by heat- sealing machine- l i k e Hot Air fusion welding machine or manually (by overlapping 15 cm of the edge of two sheet and scrubbed lightly using emery paper or sand paper (120 grade) using bitumen/Synthetic Rubber adhesive No -998 made by fevicol so that it fit exactly to fit into the pond.

- Monitor the film in sunlight for searching/puncture hole if any, sealed the hole with bitumen/adhesive or by heat-sealing procedure.
- The ends of the film at the surface have to be firmly buried in a trench at the bank of the pond to avoid sagging in of the film.
- Care shall be taken to avoid the wrinkles and film shall be pleated at the corner.

**D) Pointing over the film**

To protect the film from damage pointing over the laid film is required. Generally, locally available material / easily available material to be used

- Over laying works can be done in many ways but most suitable and economic ways are one of them is overlaying brick alone completely on all four sides, bunds and bottom of the lined tank. Secondly construct a brick work frame of size 2' x 2' and place mortar of cement and soil (1:8) inside the frame.
- Install water inlet and outlet pipes duly fixing them in brick masonry post over laid plastic film and to measure the discharge of water from the tanks, a 'V'- notch weir can be constructed.
- Drainage channel all along the border of the field is formed according to the gradient/slope.
- Live grass/ Turf is established on the bunds of the pond to prevent soil erosion.

**Procedure to be followed for executing of Farm Ponds:**

1. Farmers are to be sensitized and motivated by HOs/DHSOs to understand the concept of farm ponds to provide lifesaving irrigation to the orchards/ crops during peak periods of summer to save the gardens.
2. Preference shall be given to small and marginal farmers. SC and ST ratios shall be followed scrupulously.
3. A silt trap shall be provided at the entrance of the pond**.**
4. The sheet shall not be folded while laying.
5. The Geo Membrance sheet with 500 microns is more effiective rather than 300 microns.
6. District Officer shall obtain DMC approval for the list of feasible beneficiaries identified for farm ponds.
7. After obtaining DMC approval, the DHSO shall issue administrative sanction to farmers for taking up the farm pond as per the guidelines. The time limit for completion of community tanks may be indicated as “60 days” from the date of issue of administrative sanction.
8. **The farmers are given choice to choose firms either from empanelled/non empanelled to procure/purchase of Geo-membrane sheet but, the sheet shall be as per specifications i.e.,** BIS /ISI mark **IS 16352:2020**, other any other latest approved BIS/ISI no.) **for 300 Microns/500 Microns and the same specification of the sheet laid in farm pond shall be depicted & clearly visible in the photographs which is uploaded in Surksha portal.**
9. The subsidy shall only be released after fixing the chain linked mesh fencing and name board at Farm Pond.
10. MI Engineer shall take the MB record and Check measurement shall be done by Horticulture Officer.
11. The HO/DHSO/MI Engineer shall give technical assistance to the farmer on quality of plastic sheet/ RCC proposed for lining etc. besides inspecting the community tanks from time to time for necessary technical advice.
12. MI Engineers need to be visited / inspects at least thrice during execution and technical guidance and at final stage.
    - For marking
    - During excavation / cutting of slope
    - Bund formation and trimming of banks

13. The Joint inspection committee comprising of Farmer, HO/MI Engineer, DHSO shall finally inspect the community tanks, verify all the bills, check & confirm the quality of the lining of farm ponds as per the standards and take digital photographs.
14. The format for joint inspection is annexed.
15. **Super check by DHSOs – 100% verification by DHSO is mandatory.**
16. After completion of execution of farm pond MI Engineer and concerned Horticulture office shall issue the completion certificate along with photograph for record purpose at district level to the DHSO
17. DHSO shall inspect the farm pond along with concerned HO,MIE and inspection report along with the DMC approval shall be sent to the SHM Office by recommending for release of subsidy to the beneficiary.
18. The DHSO shall submit release proposals along with a copy of DMC approval to the Head Office for release of subsidy to the beneficiary.
19. Propper documentation to be made at HO and District level. Necessary land, identity & bank documents of the beneficiary (Photocopies), MB measurements, Joint inspection report, bills/vouchers and at least **03 photographs** for each farm pond (**Fencing, display board and BIS/ISI mark shall be depicted in photographs)** to be maintained in the office.
20. The creation of water harvesting structure shall be implemented in conjunction with Mahatma Gandhi National Rural Employment Guarantee Scheme (MNREGA) wherever feasible and shall be compulsorily linked with the new area expansion and micro-irrigation programmes
21. All the farm ponds shall be integrated with Micro irrigation. Under such conditions installation of sand filter is mandatory.
22. **Chain Fencing & Erection of display board are mandatory.**
23. The fencing shall be done by the farmer with his own cost.
24. A Display board (Iron) of size 2'x2' ft containing the following information in Telugu shall be placed near the farm pond.
25. The DHSO is responsible for proper implementation of this programme, strictly as per the norms/guidelines of GoI without any deviation.

**Department of Horticulture**

**Government of Telangana and MIDH GOI**

Name of the farmer:

Village :

Size of farm pond :

Capacity of farm pond:

Total expenditure:

Subsidy amount(Rs):

Non- subsidy amount:

**Joint inspection report for release of Assistance to Individual farm pond**

| S. No | Particulars | Specifications | Observations | Total Cost (Rs) | Eligible cost (Rs) | Eligible Subsidy (Rs) | Subsidy relesed | Proposed to be released | Bank details | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* | *10* | *11* |
| 1 | Pond Excavation | Measurements : Top:L1XB1 mts: | | | | | | | | |
| | | Bottom:L2XB2 mts, depth | | | | | | | | |
| 2 | Capacity in Cu Mts | (L1 + L2) X (B1 + B2) X depth 22 | | | | | | | | |
| 3 | Cost of Sheet | Geomenbrane/ HD PE sheet of 500 microns | | | | | | | | |
| 4 | Smoothening of surfaces | | | | | | | | | |
| 5 | Sheet fixing charges | | | | | | | | | |
| 6 | **Sub Total** | | | | | | | | | |
| 7 | Fencing | Cost of link mesh | | | | | | | | |
| | | No.of granite poles | | | | | | | | |
| | | Labour Charges | | | | | | | | |
| | **Sub Total** | | | | | | | | | |
| | **Grand Total** | | | | | | | | | |

**Certificates:**

1) This is to certify that Sri/Smt_____S/o_____has constructed farm pond as per specifications of MIDH.

2) This is to certify that all the original purchase bills of the items mentioned above have been verified by the team and found correct.

3) This is to certify that Sri/Smt_____S/o_____was not sanctioned subsidy under Farm pond earlier.

4) This is to certify that an amount of Rs._____(Rupees_____Only) is released as 1st instalment.

5) The farmer is eligible for subsidy of Rs_____Rupees_____Only) as per the specifications of farm pond and an amount of Rs_____(Rupees_____) may be released after deducting amount released as 1st instalment.

6) The subsidy amount of Rs._____(Rupees_____Only) may be released.

| Farmer | MI Engineer | Horticulture Officer | District Horticulture & Sericulture Officer |
|---|---|---|---|

**APPLICATION FORM FOR COMMUNITY FARM FONDS/ INDIVIDUAL FARM POND.**

**(Separate application has to be collected along with photograph for all the farmers involved in community farm ponds)**

Photo of farmer

1. Name of the Farmer in Full :
2. Father (or) Husband name :
3. Village :
4. Mandal :
5. Survey No. :
6. (A).Category of SC /ST / BC :
   (B). Category of SF / MF/OF :
7. Total extent of land holding Ha : Details from web land records
8. Adhar card No. :
   (Enclose & Xerox copy of Adharcard)
9. Name of the existing crop Ha :
   No. of plants per Ha (Including of Horticulture plantations)
10. No. of Bore / Bores : Functioning Yes / No
11. Energisation done to motor : Yes / No
12. Electrification facilities existing : Yes / No
13. Bank details:
    i. Farmer SB A/C No :
    ii. Name of the bank & Branch :
    iii. I.F.S.C. code :
14. Nature of soil condition : Suitable for soil excavation.
    (i.e. Black soil/ sandy loan / Red soils/ other)
15. Drip facilities available : Yes / No
16. Mobile No:

Certified that the information furnished by me is true and correct to the best of my knowledge. I/ we agree to take up farm pond (community / individual) as per the specifications and guidelines of MIDH, for release of eligible subsidy.

Signature of Farmer.

**Certification of the inspected authority HO & MI Engineers for taking up farm pond**

Certified that the preliminary inspection has been conducted, for the proposed community irrigation tank. Contacted the group of farmers ( ), and found that the soil is suitable for taking up community farm pond with size_____, can irrigate _____Ha, and recommended for taking up community farm pond as per MIDH guidelines & specifications WITH _____ lining. The Digital photo graph of the site before taking up community farm pond is enclosed.

Signature of Ho Signature of MI Engineer

Date: Date:

Approval of DHSO

## 6.INTEGRATED PEST MANAGEMENT / INTEGRATED NUTRIENT MANAGEMENT

**Objectives:**

- To create awareness among the farmers on sustainable Horticulture.
- To control the pests by utilizing minimum recommended doses of pesticides for obtaining optimum results.
- To reduce cost of cultivation.
- To promote usage of bio – products & for maintenance of ecological balance.

**Procedure:**

- Needy clusters shall be selected for implementation of INM/IPM.
- Intensive awareness on a campaign mode on the concept of INM/IPM should be conducted for all the beneficiary farmers.
- Compact blocks of 50 - 100 Ha of each crop in 2 to 3 mandals that are needy of adopting INM/IPM practices are to be selected depending on pest prevalence and furnish the name of village/ Mandal / No.of farmers & extent proposed to be covered under the programme area along with time schedule for implementation.
- The assistance under this component shall not be extended to the beneficiaries already covered during previous years.
- Preference should be given to small/marginal/SC/ST farmers.
- The beneficiaries shall apply to the Horticulture Officers of the concerned area in the format prescribed along with original passbook.
- Land holding on the basis of original passbook of the farmer and plantation should be certified by the Horticulture Officers.
- Beneficiary selection must be conducted in a **transparent manner** through. The selected list must be **registered on the Suraksha portal(After on Boarding)** and **approved by the District Mission Committee**.
- The assistance is provided on inputs only.
- Input packages containing a combination of Chemical and Bio-inputs should be recommended to the farmers in accordance with the field situation and prevalence of pests and diseases with due approval of the scientists.
- The DHSO should also furnish the detail report on the impact of IPM after taking up the programme.

- After completion of the programme the DHSO should furnish the list of beneficiaries.

**Pattern of Assistance:**

- Assistance is limited to 30% cost, subject to a maximum of Rs. 1500/- per on the total cost of inputs to a max ceiling of 2 Ha per beneficiary.

**Mode of disbursement:-**

- The Horticulture officer shall ensure that the farmers have taken up IPM practices as per the input package recommended with due verification of the bills of the inputs purchased.
- Horticulture officer shall certify the bills, submit to DHSO along with the bank account details of the farmers and recommend for release of the assistance to the farmers.
- Assistance shall be disbursed to beneficiaries through **Direct Benefit Transfer (DBT) Mode**.
-

## 7. PROTECTED CULTIVATION (PRECISION FARMING)

**Pattern of Assistance:**

| S. No | Item | Max permissible Cost | Pattern of Assistance |
|---|---|---|---|
| 1 | Naturally Ventilated Poly house (Tubular) | Rs. 1000/Sq. m (>1008 Sqm up to 2500 Sq. m) | 50% of the unit cost i.e., Maximum eligibility is 2500 sqm per beneficiary Rs. 50.00 Lakh/Ha. |
| 2 | Construction of Shade Net Houses | Rs.710 per Sqm | 50% of the unit cost i.e., Rs.35.50 per Ha.<br>Maximum eligibility is 2500 sqm per beneficiary |
| 2 | Plastic Mulching | Rs. 40,000/ha | 50% of the total cost limited to 2 ha per beneficiary. Rs. 20000/Ha. |

### A. POLY HOUSES

**Objectives:**

- Enhancing productivity.
- Promotion of high value Horticulture crops under poly houses
- Year-round production of floricultural crops and off-season production of vegetables crops.

**Points to be considered while constructing Poly house:**

East and South for the sun is excellent for the green house, which can remain open on both these sides, but it shall be shaded on the north and the west to protect from winds.

- The site shall be free from shadow.
- The site shall be at a higher level than the surrounding land with adequate drainage facility.
- Availability of good quality irrigation water and electricity.
- pH of irrigation water shall be in the range of 5.5 to 7.0 and EC between 0.1 to 0.3mS/cm.
- pH of soil shall be in the range of 5.5 to 6.5 and EC between 0.5 to 0.7mS/cm.
- Structure shall withstand to minimum wind velocity of 80.6 miles per/hr or 130 Km/hr or 36 Meter per second.

## I. General Guidelines & Procedure to apply for assistance

1. The cases shall be entertained on First Come First Serve Basis.
2. The applicant shall be responsible for the completion of all required documents. Incomplete documents do not entitle applicant to avail assistance. The application shall be considered only after submission of all the documents.
3. Farmer shall apply to concerned DHSO office through HO of concerned block with complete required documents as per check-list.
4. DHSO shall scrutinize the applications and shall submit to Head office along with DMC approval for placing before SLEC.
5. Head office shall issue administrative sanction letter after approval from SLEC.
6. In case of finance by Bank, the DHSO shall verify the documents. If found as per check-list, shall send second copy to the bank with pre-sanction letter to bank for sanctioning the loan of the project.
7. Bank after sanctioning the loan amount of project shall send a copy of sanction letter and appraisal report to DHSO for the sanction of project. The date of receiving of appraisal report in DHSO office shall be treated as first day of application and shall be considered based on available targets.
8. All the cases shall be entered through online on HORTNET in case assistance is to be availed under MIDH scheme.
9. The programme for protected cultivation shall be taken up in close coordination with the Precision Farming Development Centre (PFDC), PJTSAU, Hyd.

## II. Eligibility Criteria for applicant:

1. Minors are not eligible.
2. Educated rural youth shall be given priority.
3. Farmer means a person having land ownership in one's name. For this he has to submit Pattadar Pass book
4. Farmer includes farmer's family, means husband, wife and their minor children. Ration card is required to prove family unit.
5. The adult son/daughter or in case of his/her death, his/her widow/widower and children shall be deemed to be living with the parents or either of them. The adult son/daughter shall only be considered as separate unit only when separated from parents. It means they live separate from parents and this can be verified by means of Aadhaar card and/or Voter ID Card or Driving License or separate ration card having in all the cases separate address to that of their parents.
6. Department promotes cluster and for that farmer of Telangana State can take land on lease. But in all such cases the cluster projects shall be bankable. The combined amount of assistance to such cluster projects shall not increase 20% of the total financial targets of that district.
7. Only those applicants are eligible to apply who did not avail assistance on account of Protected Cultivation in his/her name/spouse name or in name

of dependent member of his/her family from any Government agency. Further those applicants or dependent family members who have been availed assistance under this component at anytime, anywhere in Telangana State are not eligible.

**III. Construction of Protected Structures:** The work of construction of protected structures shall preferably be completed within a period of **60-90 days**. Further, an extension of maximum 30 calendar days may be considered in advance in writing.

**IV. Terms & Conditions:**

- The estimated project details designed by the technical consultant as per technical standards of MIDH shall be attached to the application.
- Soil and water analysis reports from reputed labs are also to be enclosed to the proposal.
- Training certificate shall be enclosed along with the application.
- Protected Cultivation of vegetables only shall be promoted under MIDH in clusters around major cities/metros. These clusters may be provided with other infrastructural facilities like pre-cooling units, cold storages, refer vans, vending carts etc. and marketing arrangements may be tied up by linking with cooperatives / private retail chain.
- Farmer/ Beneficiary is responsible for the erection of the Poly House.
- The farmers / beneficiaries are given choice to select the companies / firms for erection of poly houses, but the erection of the poly house shall be as per technical specifications of MIDH. The Company/ firm shall be a registered firm and shall use BIS/ ISI standard material for erection.
- The farmer/ beneficiary is responsible for any damages to the structure in future.
- A display board depicting “Department of Horticulture”, Telangana State (Assisted Green House with logo of MIDH).
- **The payment of subsidy shall be made in 2 installments to the beneficiary through DBT. First installment shall be released after receiving satisfactory Joint Inspection Team (JIT) report of completion of erection of poly house in all aspects as per technical standards. The second installment shall be released by MIDH after receiving satisfactory JIT report for project completion and commencement of commercial production.**
- **The Joint Inspection Team shall comprise of DHSO, HO Concerned, representative from lending bank (if bank assisted), Scientist from**

**PFDC, PJTSAU, Hyd, Sr. Officer from Head office and representative from 3rd party.**

- Assistance shall not be availed from any Government Department. An affidavit duly notarized Rs. 100 stamp paper (format enclosed) to be collected from the farmer along with the proposal.
- Under Poly Houses, Flowers, Vegetables, Medicinal and Aromatic plants, Spices etc. shall be considered for cultivation.
- The proposals for construction of Poly House may also be implemented in project mode with credit link back ended subsidy.
- Documentation with photo graphs to be done at various stages of erection of Poly House and submit to State MIDH cell along with joint inspection report duly indicating the Name of the beneficiary, Extent, Village and Mandal.
- The photograph shall clearly depict the board, unit, farmer and also committee members of joint inspection team.
- The beneficiary shall utilize the structure for a period of 10 years for the purpose it was sanctioned.

**V.** DMC approval has to be obtained and list of beneficiaries shall be submitted to the State MIDH cell for approval of State Level Executive Committee (SLEC).

**VI.** Administrative sanction proceedings shall be issued by the State MIDH Cell after SLEC approval duly informing the conditions along with the design, specifications, date of completion etc.

**VII. Inspection**: There shall be Two inspections.

**a. First Inspection**: First Inspection shall be conducted by Joint Inspection Team (JIT) consisting of DHSO, HO Concerned, representative from lending bank (if bank assisted), Scientist from PFDC, PJTSAU, Hyd, Sr. Officer from Head office and representative from 3rd party after completion of erection of poly house in all aspects as per technical specifications of MIDH. This inspection shall be conducted after call from farmer/firm in written to DHSO of the District with assurance that the erection of poly house has been completed as per technical specifications of MIDH. In case of bankable cases joint Inspection team along with Banker shall carry out the inspection.

b. **2nd & Final inspection**: 2nd & final inspection shall be conducted by JIT after project completion and commencement of commercial production in the structure.

c. The DHSO/ HO shall inspect the site at least on monthly basis and shall guide the farmer in all aspects like maintenance of poly house, production practices, marketing status etc.,

**VIII. Insurance of Poly house**: The insurance of Poly house is mandatory and is the responsibility of farmer. Submission of insurance certificate is mandatory for release of 1st installment subsidy.

**IX. Marketing**: The Marketing of produce of Polyhouse is the responsibility of farmer.

**Financial Assistance by MIDH/Department of Horticulture**

**TELANGANA**

| | | | |
|---|---|---|---|
| Name | : | S/o | : |
| Village | : | Mandal | : |
| District | : | Component | : |
| Area In Sqmt | : | Assistance | : |
| | | Year of Sanction | : |

## Technical specifications for Naturally Ventilated Poly House.

**** Products with BIS standards only are accepted.**

<table>
<tr><th>Items</th><th>Description / specifications</th></tr>
<tr><td>Product</td><td>Naturally ventilated green house/ Poly house</td></tr>
<tr><td>Size</td><td>4000 sq.mts</td></tr>
<tr><td>Orientation</td><td>Preferably North South gutter direction</td></tr>
<tr><td>Width of each bay</td><td>8 meters</td></tr>
<tr><td>Distance between consecutive column pipes</td><td>4.0 m</td></tr>
<tr><td>Ridge (Central) height</td><td><table><tr><th>Area ($m^2$)</th><th>Plane land (m)</th><th>Hilly area (m)</th></tr><tr><td>4000</td><td>6.5-7.5</td><td>7 to 7.5</td></tr></table></td></tr>
<tr><td>Ridge vent</td><td>1.0-1.2 m vertical height and 1.3 to 1.5m slanting height; roof ventilator shall be provided in slanting position.</td></tr>
<tr><td>Gutter height</td><td>4.0 - 4.5mt from 1000sq.mt onwards from the ground level (based on area of green house and climatic conditions)</td></tr>
<tr><td>Gutter slope</td><td>1.25-2%</td></tr>
<tr><td>Longitudinal slope</td><td>0-2%</td></tr>
<tr><td>Gutter material</td><td>2 mm thick and 450 mm width GI Sheet with perimeter of 450 mm and with industrial press, 100% leakage proof of galvanized sheet minimum of 275 GSM ( grams per sq.mt.) Zinc coating.</td></tr>
<tr><td>Structural design</td><td>Gothic shape with roof and side ventilation. The structure is designed to be enough to with stand wind speed minimum 120 km / hour. It is to provide provision for opening one port at either side for entry of small tractor / power tiller for inter cultural practices.</td></tr>
<tr><td>Structure</td><td>Complete structure made of hot dip galvanized steel tubular pipes with a minimum of 360 GSM (with Zinc coated on continuous procedure to meet the quality requirements or equivalent section confirming). BIS standards having wall thickness 2mm; structural member shall be joined with fasteners (HOT Dip Galvanized nuts and bolts) Properly.</td></tr>
<tr><td>Columns</td><td>76mm OD, 2mm thick. Hot Dip 360GSM GI.</td></tr>
<tr><td>Trusses of 8 m long preferably without joints for better load bearing.</td><td>Bottom cord 60mm OD, 2mm thick, 8 mt. long, Hot Dip 360 GSM GI.</td></tr>
<tr><td>Trusses member/ Arch’s</td><td>50mm OD with 2mm thickness. Bracing 33mm OD with 2.0mm thickness G.I. Pipe Structural members to be fitted in plated nuts, bolts and washers without welding. (33 mm bracing to increase the strength and to with stand vertical and horizontal pressures.)</td></tr>
</table>

| Items | Description / specifications |
|---|---|
| Stay/ Hockey pipes | 60mm OD with 2mm thickness, fixed in the ground without any joints and welding at a distance of 2.5 m. |
| Purline | 48 mm OD with 2.0mm thickness at ridge gutter arch and 42/43 OD with 2.0 mm thickness for 2$^{nd}$purline. |
| Purline member and other | 43 mm,2mm thickness |
| Horizontal bracings | 42mm OD with 2mm thickness horizontal bracing 2 No's shall provide each bay in both sides. |
| Cross Bracing | Every 3$^{rd}$ column top to 2$^{nd}$column bottomof both sides shall be connected 42mm OD with 2mm thickness GI pipe to ground the wind load. (In vegetable Poly houses to take the weight of the crop and transfer the wind pressure cross bracings are essential). |
| Bottom to pillar Bracing | 33mm OD with 2mm thickness 1.2m long bracing to be fixed from pillar to bottom. |
| Foundations | Insert GI Pipes of minimum 76mm OD 3mm thickness with 1mm tapered top 1ft. or more to have foundation depth of not less than100cm or more depth depending upon soil type and prevailing wind condition, grouted with cement concrete mixture of 1:2:3 using telescopic insertion of column.<br>(or)<br>GI Pipes of minimum 60 mm OD & 3mm thickness (@4.20 kg/m) |
| Fasteners | All nuts and bolts shall be of high tensile strength and HOT dip galvanized. |
| Entrance room Indoor (not required upto 560 sq.mt. from 1000sq. mts it is required.) | One entrance room of size 3x3x2.5 mts. (LxWxH) need to be provided and covered with Poly carbonate UV stabilized transparent with sliding arrangement. Outer hinge door of size 1.5m width and 2.5m height and sliding type. |
| Cladding material (Poly film) | UV stabilized 200 micron 5 layers co-extruded anti drip/mist, anti dust, diffused/ IR blocking (sulphur resistant for Rose) having minimum 85% level of light transmittance. |
| Fixing of cladding materials | All ends/ joints of plastic film need to be fixed with two way aluminium (220grams/RM) / GI with 0.6 mm thickness profiles with suitable locking arrangements along with curtain top. Fixing of cladding material shall be done between 11.00 AM to 3.00 PM |
| Spring insert | Zig zag spring high carbon steel with spring action wire, galvanized of 2-3 mm diameter shall be inserted to fix shade net/ Polyfilm/ insect proof net into aluminium / GI profile. |
| Curtains and insect screens (mono x mono is nylon fibre, inter locked, woven mesh, more life) | i)UV stabilized 200 micron 5 layers co-extruded transparent plastic film shall be provided as curtains on all sides having manual operated crank mechanism.<br>ii) 40 mesh (115 to 120gsm) nylon /shade insect proof nets (UV stabilized), of 4.5 mts height above all four sides upto gutter height (crop specific).<br>iii)50% Mono x Mono shade net of 125 GSM, shall be fixed at side ventilators below the curtains. Rollup side GI pipes with uniform thickness throughout the side |

| Items | Description / specifications |
|---|---|
| | length of GH are suggested to ensure smooth functioning of the curtain. |
| Shadenet | UV stabilized mono x mono 50 % (115 to 120gsm) shading net has to be provided horizontally at gutter height, below the UV sheet – inside the greenhouse with manually operated mechanism for expanding and retracting. The area covered by shade net shall be equal to the net cultivable area of green house without sagging. |
| Side apron | UV stabilized HDPE woven fabric, not less than 200 GSM thick for a height of 60cm and 40 cm buried below ground vertically and 20cm horizontally. (HDPE woven fabric of 200 GSM shall have more stability and with stand the pressure of upward as well as horizontal wind better than the polythene film) |
| Erection of Trellies | For cultivation of Capsicum, Tomato and Cucumber, GI wire of 80 GSM of 4 mm (8guage) along the gable & 2.5 mm (12 guage) along the gutter with 16 lines per gable to be fixed over the beds in horizontal/ vertical direction. |
| Rain water harvesting | Provision of PVC pipe of min 5" diameter with the lateral and ground support pipe with bend shall be made, from gutter to ground for collecting rain water from the roof top. Drainage gutter and end caps to be provided. |

* Hard surface path of 1 mt. wide is to be provided to facilitate the movement in the poly house

**MI Component**

**Indicative Quantity of Material of Drip/Fogging System in Polyhouse/ Net House (as per the crop requirements)**

**** Products with BIS standards only are accepted.**

| Sl.No | Description of Items | Unit |
|---|---|---|
| A | Drip System | |
| 1 | Main and Sub-main Line PVC 63 mm x 4 kg/cm2 | Meter |
| 2 | Main Line PVC 75 mm x 4 kg/cm2 | Meter |
| 3 | 16mm LLDPE Lateral line CL-2 | Meter |
| 4 | Inline 16mm PCND, 1.3 to 2.4LPH @ 20-40 cm CL2 | Meter |
| 5 | Ball Valve 63 mm (Moulded Seal, Plain) | Nos. |
| 6 | Ball Valve 75 mm (Moulded Seal, Plain) | Nos. |
| 7 | Sub-main Flush Valve 40mm | Nos. |
| 8 | Sub-main Line for Flushing 40 mm X 6 kg | Meter |
| B | Fogging Machine | |

| Sl.No | Description of Items | Unit |
|---|---|---|
| 1 | Main and Sub-main Line PVC 50 mm x 6 kg/cm2 | Meter |
| 2 | Main and Sub-main Line PVC 63 mm x 6 kg/cm2 | Meter |
| 3 | 16mm LLDPE Lateral line | Meter |
| 4 | 4 way Fogger Assembly with HP LPD | Nos. |
| 5 | Ball Valve 50mm (Teflon Seal, Plain) | Nos. |
| 6 | Ball Valve 63mm (Teflon Seal, Plain) | Nos. |
| 7 | Sub-main Flush Valve 40mm | Nos. |
| 8 | GI Wire 2mm thick | Meter |
| 9 | Sub-main Line for Flushing 40 mm X 6 kg | Meter |
| C | Filtration Unit | Nos. |
| 1 | Disc filter 25 m3/hr | Nos. |
| 2 | Disc filter 40 m3/hr | Nos. |
| 3 | Sand filter 10 m3/hr | Nos. |
| 4 | Sand filter 25m3/hr | Nos. |
| 5 | Sand filter 40 m3/hr | Nos. |
| 6 | Manifold GI + GMV | Nos. |
| 7 | Ventury Assembly Complete | Nos. |
| 8 | Air Release Valve Assembly 1" | Nos. |

**Note:** The list above under MI component is tentative. However, the actual material to be used at site may vary as per structural design requirement and this shall be binding to the firm.

**General Conditions of Erection**

1. 22 tons of material (steel) shall be used for 1 Acre area.
2. No pipes shall be found welded. The bottom horizontal of 8 m length shall be prepared by placing one feet section of lesser size. (in side & clamping it properly).
3. The apron plastic shall be buried in the ground at least 50 cm from ground level.
4. The curtain pipe shall be cut near the door in case door is placed at the centre of the side wall. The wall of poly house having more length, at centre of the wall a complete plastic without side curtain, insect net etc. shall be fixed with separate profile and springs so that it can be removed as and when tractor operation is required in the poly-house.

5. Supplier shall ensure checking of poly-house construction materials for specifications by department representatives after supply of materials at site.
6. If fixtures found rusted the structure shall be considered incomplete.
7. In case of top poly-film fitted to the arches, if the length of top is more than 30 m, then the top plastic to be fitted to arch at every 24 m length by using profile and zig zag spring to avoid flapping of top plastic during winds.
8. Fixing of top poly-sheet shall be fixed with profile and spring in the center of gutter length.
9. Self-drilling screw in profile shall not be more than 30 cm apart
10. While installing the multilayer film, first insure that respective layers are facing the right direction as shown on film (e.g. inside out)
11. Provide a sample of one sqm size of poly-film, thermal net etc. having manufacturer's identification mark along with batch no.
12. Film shall be tensioned tightly enough so that there shall not be flapping during windy days.
13. The structural design shall be sound enough to withstand wind velocity as per Telangana State conditions.
14. The companies shall get structural design verified from the structural engineer.
15. Regarding material used under MI component the firm shall use BIS mark material. The system shall run smoothly and there shall be no leakage.
16. Department shall arrange the water source, electricity and booster pump to operate the MI system.
17. The overall structure shall perform satisfactory in all respects.

## FORMAT – I

Recent Passport Size

Application for Availing Assistance / Subsidy Under MIDH Through State Horticulture Mission

**Name of the Scheme**: **Protected Cultivation**

**Component: POLY HOUSE**

| | | | |
|---|---|---|---|
| 1 | Name of the Farmer | : | |
| 2 | Father / Husband Name | : | |
| 3 | Caste (SC/ST/BC/OC) | : | |
| 4 | Address | : | |
| | Phone / Cell No. | : | |
| 5 | Land records with Extent in Acres / Ha.<br>(Copy of Pass Book / Computer pahani) | : | |
| 6 | Area Proposed in Sq.mtrs./Ha. | : | |
| 7 | Account No & Name of the Bank & Address | : | |
| 8 | Proposed crop | : | |
| 9 | Source of procurement of planting material | | |
| 10 | Source of Irrigation (Open well / Bore well) | : | |
| 11 | Soil & Water Analysis<br>Soil PH & EC, Irrigation water PH & EC<br>Soil & Water Analysis reports to be enclosed.<br>(Not needed for Mulching) | : | |
| 12 | Estimated cost of the project Details of the project by the technical consultant to be enclosed. | | |
| 13 | Whether any Govt. Subsidy availed previously | : | |
| 14 | Any other relevant information | : | |

## Declaration

I,_____ declare that the particulars furnished above are true to the best of my knowledge and I promise that the benefit obtained from State Horticulture Mission shall be used for the purpose for which it is given and in case of misuse I am liable for any action deemed to be fit by Govt. of Telangana State., including recovery of the subsidy amount with 12% interest to the Government.

Signature of the Farmer / Entrepreneur.

Recommendations of the Horticulture Officers _____

DHSO

Check list:

1. Pattadar Pass Book
2. Detailed Project Estimate
3. Soil & Water Analysis
4. Affidavit

**WORK FLOW & CHECK LIST FOR DOCUMENTS TO BE SUBMITTED TO POLY HOUSE**

| Sl. No. | Description | Documents to be submitted by / Action to be taken |
|---|---|---|
| 1 | Application Form –Format-I | Farmer |
| 2 | Soil & Water Analysis Water Report | |
| 3 | Affidavit – Format – II | |
| 4 | Pattadar Pass Book Copy | |
| 5 | Project Estimate as per MIDH norms | |
| 6 | Organization of training programme / Field Visit | DISTRICT OFFICER |
| 7 | Application filling in SURAKSHA | Farmer / HO |
| 8 | District Mission Committee Approval | DHSO |
| 9 | SLEC Approval | State MIDH cell |
| 10 | Issue of Administrative Sanction | State MIDH cell |
| 11 | Erection of Poly House | Farmer |
| 12 | Completion & Under Taking – Format – III | Farmer |
| 13 | 1st Joint Inspection after completion of erection Format - IV | Committee Members |
| 14 | Submission of bills & invoices | Farmer / HO |
| 15 | Sending of joint inspection report by obtaining DHM approval for sanction and release of assistance along with photo graphs to state MIDH cell for release- 1st installment | DHSO |
| 16 | Uploading the bills and field photos in SURAKSHA | DHSO |
| 17 | Release of subsidy to the beneficiary through online transfer (SURAKSHA) | State MIDH cell |
| 18 | 2nd Joint inspection after commencement of commercial production – Format -V | Committee Members |
| 19 | Submission of release proposals along with DMC approval and SURAKSHA filing | DHSO |
| 20 | Release of funds – 2nd installment | State MIDH cell |

**FORMAT – II**

**AFFIDAVIT (Rs. 100/- Stamp Paper )**

I / We _____ (Name of the Promoter / Director) son of _____ Father's Name ) resident of _____ ( residence address ) do hereby solemnly affirm and declare here under.

1) That I am the director of _____, ( name of the beneficiary ) having its registered office at _____, (office address of beneficiary ) and am fully aware of the facts relating to the setting up the Green House at _____ (location of the Green House) for _____ (activities to be undertaken by Green House ) and the application made to MIDH for availing assistance under Developmental Schemes _____

2) That the terms and conditions of the scheme of MIDH under which an application has been made by the applicant have been properly read and understood by me and I affirm that the Green House / proposal / scheme comply with the terms and condition of MIDH and the application has been made in the correct applicable scheme.

3) That the proposed activities to be undertaken by the Green House / proposal / scheme are covered under the above scheme of MIDH and no part of the scheme / infrastructure of the Green House is designed or assigned to be used for any activity other than the activities specified in the application at present or in the near future.

4) That the information provided in the application for availing assistance under developmental schemes – _____ is true and correct to the best of my knowledge and belief. The estimates of the cost of Green House / proposal / scheme, financial viability and operating results have been worked out / computed as per the rule and generally accepted principles and norms in this regard.

5) No Subsidy / grant – in – aid has been availed by the promoters / directors / partners / proprietors for this new project and component thereof from central Govt. or any its agencies.

6) I / We also solemnly affirm that the proposed activity in the application for availing assistance under development Schemes _____ is a completely new activity and not a pre – existing activity or any Component thereof and further I assure that the unit shall be utilized for the same activity for which the assistance is sought from the MIDH through State Horticulture Mission of Telangana for the

economic period of 10 years. In case, if the unit is misused, I am liable for any action deemed to be fit by the Govt. of Telangana including recovery of the assistance amount extended. The information furnished in the application dated _____ is true to the best of my knowledge and belief and nothing material has been concealed.

7) In case of concealment of any facts in this regard, the MIDH shall have right to cancel my application out right at any stage.

8) I shall display a sign board depicting “Department of Horticulture’’, Telangana State (MIDH, Assisted Poly House) with logo of MIDH.

9) The release of subsidy is subject to actual expenditure, receipts, inspection, MIDH norms etc., In case of any discrepancy / dispute the decision of the Mission Director & Director of Horticulture is final.

10) I agree and resolve that the department reserves the right to modify, add or delete any term/ condition without assigning any reason thereof and shall also have right to pre and post inspect / monitor the Poly House and verify the related records at any time during the economic life of the Poly House by the concerned officers.

**DEPONENT VERIFICATION**

Verified on solemn affirmation at _____ that the content of the above affidavit are true to the best of my knowledge and belief and nothing material has been concealed.

**DEPONENT / COMPETENT AUTHORITY**

(To be signed by Notary with seal)

**Format - III**

**Dt: ……2025**

To
DHSO
…….. District

## COMPLETION & UNDERTAKING

This is to certify that as per the guidelines and technical standards of MIDH the construction of Poly House was completed. The following materials were supplied for construction of Poly House in an area of …….. sq.mtrs in……. survey no……. . of Sri……, S/o……., ……..(V), ……..……(M), …….. District

| S.No | Name of the Item | Quantity | Rate | Total Amount |
|---|---|---|---|---|
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | | | | |
| | **Total** | | | |

**Signature of Farmer**:

**Signature :**

**Name :**

**Seal :**

**Cell No. :**

## Format – IV

**FORMAT TO CONDUCT 1st JOINT INSPECTION OF POLY HOUSE BY THE COMMITTEE UNDER PROTECTED CULTIVATION COMPONENT OF MIDH THROUGH STATE HORTICULTURE MISSION OF TELANGANA**

**Name of the Component: POLY HOUSE**

| Sl. No. | Name of the Farmer & Address | Cate gory | Village | Mandal | Survey No. | Area in Sq.mtrs. | Crop | Expenditure incurred by the farmer (Rs.) | Subsidy recommended by the committee (Rs.) | Re marks |
|---|---|---|---|---|---|---|---|---|---|---|
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* | *10* | *11* |
| | | | | | | | | | | |

**Certificates:**

1) This is to certify that the above farmer has erected/ installed Poly House as per the Technical standards of MIDH.

2) This is to certify that all the original purchase bills of the items for Expenditure incurred have been verified and found correct.

3) This is to certify that the above farmer is eligible to avail subsidy of Rs. _____/-.

4)The subsidy amount of Rs. _____/- is recommended to release to the said beneficiary towards 1st installment.

**Farmer** **HO** **DHSO** **Banker (if)**

**Scientist from PFDC** **Sr. Officer from Head Office** **3rd party member**

**Format – V**

| **FORMAT TO CONDUCT 2nd & FINAL JOINT INSPECTION OF POLY HOUSE BY THE COMMITTEE UNDER PROTECTED CULTIVATION COMPONENT OF MIDH THROUGH STATE HORTICULTURE MISSION OF TELANGANA**<br>**Name of the Component: POLY HOUSE** | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Sl. No.** | **Name of the Farmer & Address** | **Category** | **Village** | **Mandal** | **Survey No.** | **Area in Sq.mtrs.** | **Crop** | **Expenditure incurred by the farmer (Rs.)** | **Subsidy recommended by the committee (Rs.)** | **Remarks** |
| *1* | *2* | *3* | *4* | *5* | *6* | *7* | *8* | *9* | *10* | *11* |
| | | | | | | | | | | |

**Certificates:**

i. This is to certify that the above farmer has erected/ installed Poly House as per the technical standards of MIDH. The commercial production of poly house has been started.

2) This is to certify that all the original purchase bills of the items for Expenditure incurred have been verified and found correct.

3) This is to certify that the above farmer is eligible to avail subsidy of Rs. _____/-.

4) The subsidy amount of Rs. _____/- is recommended to release to the said beneficiary towards 2nd installment.

**Farmer** **HO** **DHSO** **Banker (if)**

**Scientist from PFDC** **Sr. Officer from Head Office** **3rd party member**

## B. SHADENET HOUSES

**Objectives:**

- ❖ Enhancing productivity.
- ❖ Promotion of high value Horticulture crops under Shade Net Houses.
- ❖ Propagation of planting material to improve germination percentage and better hardening.
- ❖ Year-round production of floricultural crops and off-season production of vegetables crops.

**i. Pattern of Assistance:**

| S. no | Item | Max permissible Cost | Pattern of Assistance |
|---|---|---|---|
| 1 | Shadenet House (Tubular structure ) | Rs.710/Sqm | 50% of cost limited to 2500 Sq.m.per beneficiary. |

**ii.** General guidelines, eligibility criteria, trainings, Construction, Terms & Conditions, Inspections, Formats for Application, Affidavit, Formats for Joint Inspection etc., and Check list applicable to Polyhouses shall holds applicable for Sahdenet Houses also.

**iii. Indicative Specifications for Shadenet house under Protected Cultivation**

**Shade net House (Dome shaped/Top Flat)**

| Sl. No. | Particulars | Description |
|---|---|---|
| 1 | Area in sqm | 1000 to 2500 sqm |
| 2 | Length of structure | As per design |
| 3 | Width of the structure | As per design |
| 4 | Grid | 4 m x 6 m |
| 5 | Straight Corridors | Maximum 2 m all sides for area calculation |

**Structural parts (GI Pipes) Shade net House :**

| GRID Size:6mx4m | | | Shade Net Height from GL -4m | | |
|---|---|---|---|---|---|
| **S. no** | **Particulars** | **PIPE SIZE ODin mm** | **NOMINAL DIA** | **Unit wt(kg/m)** | **LENGTH (m)** |
| 1 | Foundations for Balcony pipes | 48mm/3mm thickness | 1.5" | 3.5 | 1.2 |
| 2 | Foundations for Outer Columns | 48mm/3mm thickness | 1.5" | 3.5 | 1 |
| 3 | Foundations for Inner Columns | 48mm/3mm thickness | 1.5" | 3.5 | 0.75 |
| 4 | Main(All) Columns | 60mm/2mm thickness | 2" | 2.9 | 4 |
| 5 | Truss Pipe (Along the gable) | 48mm/3mm thickness | 1.5" | 2.3 | 6 |
| 6 | Purlin Pipe (Across the gable) | 48mm/3mm thickness | 1.5" | 2.3 | 4 |
| 7 | Corridor/Balcony Pipe | 60mm/2mm thickness | 2" | 2.9 | 4.8 |
| 8 | Horizontal Member in Corridor | 33mm/2mm/thickness | 1.5" | 1.6 | 1.2 |
| 9 | Knee bracing at all columns | 33mm/2mm/thickness | 1.5" | 1.6 | 1.2 |
| 2.5 m wide corridors for 4m height shall be provided on all four sides | | | | | |

- Lengths upto 200mm may vary from fabricator to fabricator based on their clamping/joint mechanism/design.

**Other parts of the structure Shade net House:**

| **Sl. no** | **Particulars** | **Specifications** |
|---|---|---|
| 1 | Clamps | Shall be made from minimum 2.5mm thickness MS sheets and hot dip galvanized. The clamps shall resist 400 hours of salt spray test. |
| 2 | Bolts, Nuts and Washers | High tensile bolts, nuts and washers with a minimum size of 3/8" or M10 and Zinc Plated to White or Yellow color. This hardware shall resist 150 hours of salt spray test. |
| 3 | Galvalume profiles | These profiles made of GI sheet strip of minimum 0.6mm thickness and coated with Aluminum alloy and shall have the provision to run two springs. |
| 4 | Zig - Zag Springs | The springs shall be made of high tensile steel wire with a minimum diameter of 2.5 mm and coated with Zinc /PP/HDPE materials. |
| 5 | Insect Proof Net | UV stabilized insect proof net (preferable in white color) made of HDPE monofilament fabric to the size of 40 mesh/50 mesh having a minimum weight of 105 GSM. |
| 6 | Shade Net - Tape Type | UV Stabilized shade net made of tape type yarn from HDPE virgin raw materials. Preferably white color shade net with 50% shade shall be used for cultivation purpose and Green /Black color shall be used for Nursery applications. The 50% shade net shall be of minimum 90 GSM |

| Sl. no | Particulars | Specifications |
|---|---|---|
| 7 | Shade Net - Monofilament type | UV stabilized shade net made of monofilament yarn from HDPE virgin raw material. Preferably white Color Shade net with 50% shade shall be used for cultivation purposes and Green/ Black color shall be used for Nursery applications. The shadenet with minimum 115 to 125 GSM shall be used in shadenet structural applications. |
| 8 | Human Entry | The Human entry shall be free from the main structural members and foundations. The human entry shall be fixed within the balcony area with independent foundations. The human entry shall have a double door entry system with a minimum cubicle size of 4m(L)x 3m(W) x 2m(H). The cubicle shall be made of independent structural members with two doors and covered with insect proof net/ Apron materials. The doors shall not have any gaps or vents, and preferably fitted with air sealing materials. |
| 9 | Tractor entry | The tractor entry shall be free from the main structural members and foundations. The tractor entry shall have a minimum size of 2.7 width and 2.7 heigh with independent structural members. The entry shall have a collapsible door system covered with insect proof net. Air sealing materials shall be used in door system. |

**Entry Room (2 door of 2m x 2m Aluminum and poly carbonate mix)**

| Sl. No | Description | Specification |
|---|---|---|
| 1 | Entry room size | 4 m x 4 m, 4 m x 3 m, 3 m x 3 m |
| 2 | No of doors | 02 (inner door may be of frame stitched with 40 mesh insect net of minimum 50 cm overlapping) |
| 3 | Door size | 1.2 m x 2 m; Door of GI square pipe |
| 4 | Frame of door (ISA four sides to cover the gap below the door) | Galvanized |
| 5 | Half part of door (Downside) | Aluminum sheet |
| 6 | Upper half part of door | Poly carbonate sheet **5 mm** thick |
| 7 | Flooring | Bricks flooring with plaster 15 mm thick |

**MI Component**

**Indicative Quantity of Material of Drip/Fogging System in Poly house/Net House**

| Sl.No | Description of Items | Unit | Size of Poly House(sqm) >1008 to 2500Sqm | |
|---|---|---|---|---|
| | | | 1008 | 2500 |
| **A** | **Drip System** | | | |
| 1 | Main and Submain Line PVC 63 mm x 4 kg/cm2 | Meter | 48 | 106 |
| 2 | Main Line PVC 75 mm x 4 kg/cm2 | Meter | 0 | 0 |
| 3 | 16mm LLDPE Lateral line CL-2 | Meter | 70 | 180 |
| 4 | Inline 16mm, 1.3 to 2.4LPH @ 20-40 cm CL2 | Meter | 500 | 2260 |
| 5 | Ball Valve 63 mm (Moulded Seal, Plain) | Nos. | 2 | 2 |
| 6 | Ball Valve 75 mm (Moulded Seal, Plain) | Nos. | 0 | 0 |
| 7 | Submain Flush Valve 40mm | Nos. | 2 | 2 |
| 8 | Submain Line for Flusing 40 mm X 6 kg | Meter | 40 | 90 |
| **B** | **Fogging Machine** | | | |
| 1 | Main and Sub-main Line PVC 50 mm x 6 kg/cm2 | Meter | 42 | 106 |
| | | | | |
| 2 | Main and Sub-main Line PVC 63 mm x 6 kg/cm2 | Meter | 0 | 210 |
| 3 | 16mm LLDPE Lateral line | Meter | 450 | 1150 |
| 4 | 4 way Fogger Assembly with HP LPD | Nos. | 125 | 362 |
| 5 | Ball Valve 50mm (Teflon Seal, Plain) | Nos. | 1 | 1 |
| 6 | Ball Valve 63mm (Teflon Seal, Plain) | Nos. | 0 | 0 |
| 7 | Submain Flush Valve 40mm | Nos. | 2 | 2 |
| 8 | GI Wire 2mm thick | Meter | 350 | 1000 |
| 9 | Submain Line for Flusing 40 mm X 6 kg | Meter | 42 | 96 |
| **C** | **Filteration Unit** | Nos. | 1 | 1 |
| 1 | Disc filter 25 m3/hr | Nos. | 0 | 0 |
| 2 | Disc filter 40 m3/hr | Nos. | 1 | 0 |
| 3 | Sand filter 10 m3/hr | Nos. | 1 | 0 |
| 4 | Sand filter 25m3/hr | Nos. | 0 | 1 |
| 5 | Sand filter 40 m3/hr | Nos. | 0 | 0 |
| 6 | Manifold GI + GMV | Nos. | 1 | 1 |
| 7 | Ventury Assembly Complete | Nos. | 1 | 1 |
| 8 | Air Release Valve Assembly 1" | Nos. | 1 | 1 |

**Note:**

1. The list above under MI component is tentative. However, the actual material to be used at site may vary as per structural design requirement and this shall be binding to the firm.
2. The width of insect nets rolls available is 3.6 meter or more. The stitching below 3.0 meter is not permitted. Above 3.0 m, if needed, the double stitching shall be done with machine using UV stabilized thread.

**A model bill of materials for Shadenet houses is as below:**

## BOM OF DOME SHAPED STANDARD SHADE NET HOUSE WITH ALUMINET

| DOME SHAPED TOP NET HEIGHT ABOVE GROUND LEVEL -- 6 m | | | GRID SIZE: 6m X 4m | | TOTAL AREA : | 4081 | sq.m |
|---|---|---|---|---|---|---|---|
| S.No | Description | Qty Unit | Description | Qty Unit | DOME SHAPED STANDARD SHADE NET HOUSE WITH ALUMINET | | |
| 1 | GABLE LENGTH | 6 m | NET GABLE LENGTH | 48 m | | | |
| 2 | SHADE SPAN WIDTH | 4 m | NET SHADE SPAN WIDTH | 72 m | | | |
| 3 | No.OF GABLES | 8 No | NET CULTIVABLE AREA | 3456 sq.m | | | |
| 4 | No.OF SHADE SPANS | 18 No | GROSS GABLE LENGTH | 53 m | | | |
| 5 | BALCONY ON FOUR SIDES | 2.5 m | GROSS SHADE SPAN LENGTH | 77 m | | | |
| 6 | Height of NET HOUSE | 5 m | GROSS SHADE AREA | 4081 sq.m | | | |

| S.No | Description | Specification | Nos | Qty | Unit | Rate | Amount |
|---|---|---|---|---|---|---|---|
| A | STRUCTURAL MATERIALS | | | | | | |
| 1 | Foundations for Balcony pipes | OD: 48mm/3mm/1.2m | 56 | 235.2 | kg | 65.00 | 15288.00 |
| 2 | Foundations for Outer Columns | OD: 48mm/3mm/1m | 52 | 182.0 | kg | 65.00 | 11830.00 |
| 3 | Foundations for Inner Columns | OD: 48mm/3mm/0.75m | 119 | 312.4 | kg | 65.00 | 20304.38 |
| 4 | Main (All) Columns | OD: 60mm/2mm/4m | 171 | 2052.0 | kg | 65.00 | 133380.00 |
| 5 | Truss Pipe (Along the gable) | OD: 48mm/2mm/6m | 152 | 2143.2 | kg | 65.00 | 139308.00 |
| 6 | Arch Pipe | OD: 48mm/2mm/6.4m | 152 | 2280.00 | kg | 65.00 | 148200.00 |
| 7 | Center support pipe | OD: 33mm/2mm/1.0m | 152 | 243.20 | kg | 65.00 | 15808.00 |
| 8 | Purlin Pipe (Across the gable) | OD: 48mm/2mm/4m | 306 | 2876.40 | kg | 65.00 | 186966.00 |
| 9 | Corridor/Balcony Pipe | OD: 60mm/2mm/4.8m | 56 | 806.4 | kg | 65.00 | 52416.00 |
| 10 | Horizontal Member in Corridor | OD: 33mm/2mm/1.2m | 56 | 107.5 | kg | 65.00 | 6988.80 |
| 11 | Knee bracing at all columns | OD: 33mm/2mm/1.2m | 342 | 656.6 | kg | 65.00 | 42681.60 |
| 12 | HUMAN ENTRY | Double Door System | 1 | 1 | set | 20000.00 | 20000.00 |
| 13 | TRACTOR ENTRY | AS PER SPECIFICATIONS | 1 | 1 | set | 14000.00 | 14000.00 |
| 14 | CLAMPS, COUPLERS AND ALL HARDWARE ITEMS | 2.5mm thick/300 GSM | LS | 4081 | sq.m | 20.00 | 81620.00 |
| | | | | SUB-TOTAL-A | | | 888790.78 |
| | | | | EXCISE DUTY + 12.5% | | | 111098.85 |
| | | | | TOTAL-A | | | 999889.62 |
| B | CLADDING MATERIALS | | | | | | |
| 1 | OPTINET OR EQUIVALENT ON TOP | OPTINET: 40MESH 120 GSM/ WHITE C | 4286.5 | 4287 | sq.m | 70.00 | 300056.40 |
| 2 | OPTINET OR EQUIVALENT ON SIDES | OPTINET: 40MESH 120 GSM/ WHITE C | 1713.6 | 1714 | sq.m | 70.00 | 119952.00 |
| 3 | ALUMINET OR EQUIVALENT AS SECOND LAYER | ALUMINET- 50% SHADE : 80GSM | 3969 | 3969 | sq.m | 80.00 | 317520.00 |
| | | | | TOTAL-B | | | 737528.40 |
| C | OTHER MATERIALS | | | | | | |
| 1 | GALVALUME PROFILE | 0.6mm thick/100-120GSM | 1228 | 1228 | m | 45.00 | 55260.00 |
| 2 | Zig-zag Spring Insert | 2.5mm OD GI/PP COATED | | 2456 | m | 10.00 | 24560.00 |
| 3 | GI WIRE FOR SHADE NET | 2.5mm OD/ 50-70 GSM | | 156.3 | kg | 52.00 | 8126.98 |
| 4 | GI WIRE FOR TRELLISING | 2.5mm OD/ 50-70 GSM | | 312.6 | kg | 52.00 | 16255.20 |
| 5 | GI Wire Rope For Trellising | 4.0mm OD/ 1 X 19 or 7 x 19 | | 2090 | m | 18.00 | 37620.00 |
| 6 | Semi-automatic Shade net retraction system | AS PER SPECIFICATIONS | | 4081.0 | sq.m | 60.00 | 244860.00 |
| 7 | Drip Irrigation System including Foggers | AS PER SPECIFICATIONS | | 4081 | sq.m | 71.00 | 289751.00 |
| | | | | TOTAL-C | | | 676433.18 |
| | TOTAL STRUCTURAL MATERIAL COST | | | TOTAL- (A+B+C) | | | 2413851.20 |
| | | | | SALES TAX(CST/VAT) + 5% | | | 120692.56 |
| | | | | TOTAL-(ABC) | | | 2534543.76 |
| D | FOUNDATION MATERIALS | | | | | | |
| 1 | Foundations for corridors | B300 GRADE CC: 15" X 6' | 56 | 11.4 | cu meter | 5500.00 | 62843.46 |
| 2 | Foundations for Outer columns | B300 GRADE CC: 15" X 5' | 52 | 8.8 | cu meter | 5500.00 | 48628.87 |
| 3 | Foundations for Inner columns | B300 GRADE CC: 12" X 1m | 119 | 7.6 | cu meter | 5500.00 | 41616.38 |
| 4 | Flooring inside Double Door Entry | Brick work + CC - 3m x 4m x 0.1m | 12 | 1.2 | cu meter | 12000.00 | 14400.00 |
| | | | | TOTAL-D | | | 167488.71 |
| E | LABOUR COST | | | | | | |
| 1 | Foundation | 6'/5'/3' depth x 15" & 12" | | 227 | Nos | 150.00 | 34050.00 |
| 4 | FABRICATION CHARGES | As per design requirement | | 4081 | sq.m | 40.00 | 163240.00 |
| 5 | INSTALLATION CHARGES | As per design requirement | | 4081 | sq.m | 40.00 | 163240.00 |
| 6 | TRANSPORTATION CHARGES | | | | | | 30000.00 |
| | | | | SUB-TOTAL-E | | | 390530.00 |
| | | | | SERVICE TAX + 15% | | | 58579.50 |
| | | | | TOTAL-E | | | 449109.50 |
| F | INSURANCE | Standard fire and special perils policy | | 0.25% of Unit Cost | | | 7877.85 |
| | | | | GRAND TOTAL | | | 3159019.82 |
| | | | | COST PER SQ.M | | | 774.08 |
| | | | | Unit Cost Limited to Rs. | | | 710.00 |

## C. PLASTIC MULCHING

Mulching is a practice followed for conservation of soil moisture, to check weed growth and to improve the quality and yield of Horticulture crops. Some of the tips for plastic mulching are

- The farmers are suggested to use different colours of mulching sheet i.e., Black & White (summer season), Black & Silver (Kharif and Rabi Season).
- Transparent mulch is recommended compared to black mulch as it creates congenial microclimate for crop root zone.
- Soil temperature profile varies under transparent and black mulches and hence for deep rooted crops black mulch is recommended.
- To remove the mulch sheet the farmers shall wet the Soil before ploughing the mulching sheet after completion of the cropping.
- Burning of mulching sheet shall be avoided and it shall be disposed for recycling.

**Pattern of Assistance:**

| S. No | Item | Max permissible Cost | Pattern of Assistance |
|---|---|---|---|
| 1 | Plastic Mulching | Rs. 40,000/ha | 50% of the total cost limited to 2 ha per beneficiary. Rs. 20,000/Ha. |

**Thickness of Film:**

In plastic mulching, the thickness of mulch film shall be in accordance with type & age of crops. Economics suggest that the film thickness shall be the minimum possible commensurate with desired life & strength. The recommended thickness of mulch films for different crops is as under:

| Thickness (microns) | Crops Recommended |
|---|---|
| 20-25 | Annual - Short duration crops |
| 40-50 | Biennial - Medium duration crops |
| 50-100 | Perennial - long duration crops & crops taken up in Pandals |

**Extent of Surface to be Covered under Film:**

| % Coverage | Crops Recommended |
|---|---|
| 20-25 | All creeper crops |
| 40-50 | Initial stage of orchard crops |
| 40-60 | Fruit crops & cucurbitaceous |

| | |
|---|---|
| 70-80 | Vegetables, Papaya, Pine apple etc., |
| 90-100 | Soil Solarization |

Mulching area shall preferably be equivalent to the canopy of the plant (larger the canopy, larger the area of mulching and vice versa).

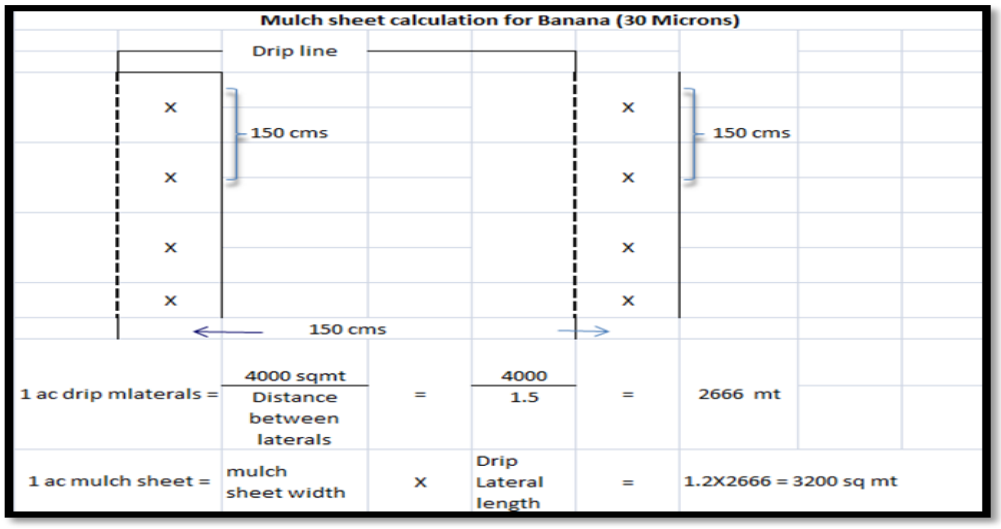
**Calculation of Mulch Film Requirement (Approximately):**

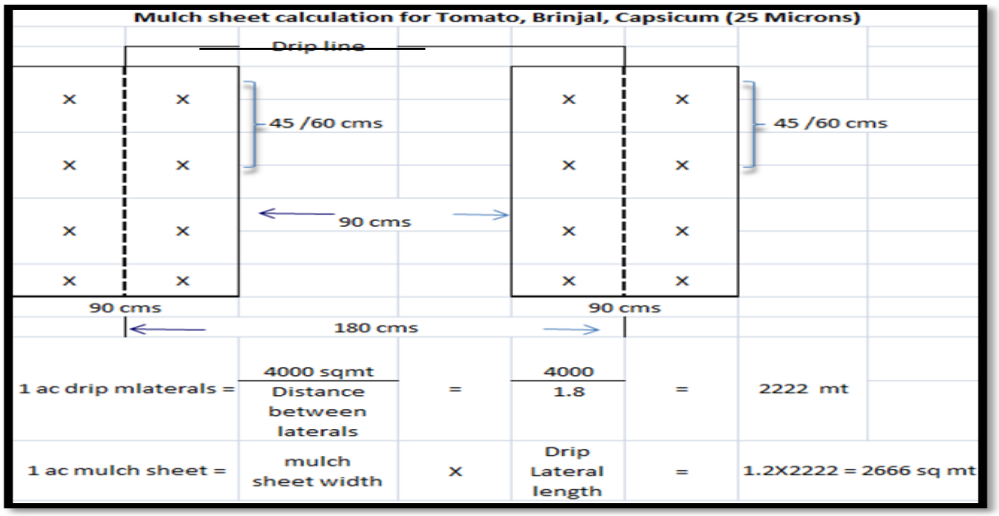
| Thickness | | | Area coverage (m2/kg) | Weight (Gram/m2) |
|---|---|---|---|---|
| Micron | Gauge | mm | | |
| 7 | 28 | 0.007 | 144 | 6.9 |
| 20 | 80 | 0.02 | 54 | 18.4 |
| 25 | 100 | 0.25 | 42 | 23 |
| 40 | 160 | 0.04 | 26 | 38 |
| 50 | 200 | 0.05 | 21 | 46 |
| 100 | 400 | 0.10 | 11 | 93 |

**Indicative Cost of Plastic Mulching:**

On the basis of 80% coverage of area under the film, indicative cost of mulching for Horticulture crops shall be Rs. 40,000/- per ha.

Examples for calculation of requirement of Mulch Sheet:






## Terms & Conditions:

1. Farmers shall be given choice to procure the mulching sheet from the firms of their own choice by incurring full cost mulching material. The mulching sheet shall be of BIS: ISI certified.
2. After verification of the invoices / bills and Physical verification in the field, the assistance shall be online transferred to the farmers account as per the eligibility and cost norms.
3. Farmers once availed subsidy under this component is not eligible for the 2nd time, subject to the maximum eligibility of 2 Ha.
4. The subsidy is 50% of the permissible unit cost (limited to Rs. 20,000 / ha) with maximum limit of 2 Ha / Beneficiary.
5. The subsidy shall be calculated on the basis of extent of surface covered under plastic mulch. On the basis of 80% coverage of area under the film, indicative cost of mulching for Horticulture crops shall be Rs. 40,000/- per ha.
6. The selected beneficiaries shall be given training programme on concept of Mulching, benefits of mulching, selection of mulch sheet, quantity required and gauge of mulch sheet.
7. Only Horticulture crops are eligible for assistance.
8. DMC approval to be obtained for identified beneficiaries and for final release of assistance.
9. The scheme shall be implemented for promoting intensive cultivation of vegetables in a cluster mode.
10. Documentation with photographs shall be done after laying out of mulch sheet.
11. Application registration in SURAKSHA shall be done by the concerned HO.
12. Uploading the bills and field photos in SURAKSHA shall be done by the concerned HO/DHSO for release of subsidy to the beneficiaries through online transfer.

## CHECK LIST FOR INSPECTION FOR RELEASE OF FUNDS UNDER COMPONENT MULCHING

| Sl.No. | Description | Remarks (YES/NO) |
|---|---|---|
| 1 | Application of the farmers along with photos and relevant documents | |
| 2 | Existing crop and spacing | |
| 3 | Drip Irrigation system installed in the field | |
| 4 | Bills & Vouchers submitted | |
| 5 | Details of Beneficiaries were uploaded in the SURAKSHA | |
| 6 | DMC approval for sanction & release of funds | |
| 7 | Feedback of the farmers | |
| 8 | Inspection report of Concerned Horticulture Officer | |

## 8. POLLINATION SUPPORT THROUGH BEE KEEPING

**Pattern of assistance:**

| S. No | Sub-Component | Unit Cost | Pattern of Assistance |
|---|---|---|---|
| 1 | Honey bee colony | Rs.4000/colony of 8 frames | 40% of cost limited to 50 colonies / beneficiary. |
| 2 | Bee Hives | Rs 2000/ per hive. | 40% of cost limited to 50 hives / beneficiary |
| 3 | Equipment including honey extractor (4 frame), food grade container (30 kg), net, including complete set of Bee keeping equipment. | Rs. 20,000/set | 40% of the cost limited to one set per beneficiary. |

- The main objective of this component is support pollination in orchards through bee keeping.
- Beneficiaries are free to purchase colonies & Hives from any public sector institutions /registered bee keepers with NBB/ member Organizations /Societies of NBB (National Bee Board) or Beekeeping and honey societies registered under cooperative act.
- It shall be ensured that all the equipment are BIS standards and made of stainless steel/ Food Grade Plastic / Quality wood.
- Beekeepers provided with financial assistance may be directed to get their bee colonies from bee keepers /breeders registered with NBB on individual / group basis on priority.
- The beneficiary shall take up this activity where abundant flora is available preferably farmers having Horticulture activity.
- The procurement of the required beekeeping equipment shall be from the list of approved firms of National Bee Board or KVIC of GoI.
- All the non-negotiables for implementation of MIDH scheme shall be followed.

## 9. INTEGRATED POST HARVEST MANAGEMENT

Under post-harvest management, activities like handling, grading, pre-conditioning, packaging, transient storage, transportation, distribution, curing and ripening and where possible long-term storage can be taken up. Existing schemes of the Directorate of Marketing and Inspection (DMI) and National Cooperative Development Corporation (NCDC) shall be leveraged to the extent possible. MIDH shall include projects relating to establishment of pre-cooling units, 'on-farm' pack houses, staging cold rooms, cold storage units with and without controlled atmosphere capability, integrated cold chain system, supply of refrigerated vans, refrigerated containers, primary/mobile processing units, ripening chambers, evaporative/low energy cool chambers, preservation units, onion storage units and zero energy cool chambers. These projects shall be entrepreneur driven and provided credit linked back-ended subsidy. PSUs/ Government agencies/ Cooperatives/ growers' association recognized/ registered by the DMCs, having at least 25 members, shall also be entitled to avail assistance for such activities. They may avail back ended subsidy without credit link, subject to condition that they are able to meet their share of the project cost.

**PHM Projects- Telangana State-Steps to be followed in General:**

**1. At the time of receiving the proposal from promoter at the DHSO office**

1) Application along with synopsis shall be in prescribed format duly signed by the promoter.
2) The documents to be submitted for that particular component are to be verified as per the check list.
3) All the project proposals shall be numbered in print / ink with index showing the contents as mentioned in check list.
4) Issue of acknowledgement to the promoter.

**2. Verification in DHSO office.**

1) Application shall be verified that all the columns are properly filled with the signature of the promoter.
2) The documents are to be verified as per the check list and the check list shall be duly signed by the DHSO for onward submission to State cell.
3) If any documents are missing the promoter shall be asked to submit the pending documents within one week.
4) The approvals from concerned departments like fire department, pollution control board, electricity department, municipality etc., has to be thoroughly verified.
5) After receipt of all documents DHM approval has to be obtained.
6) The DHSO shall forward the project proposals in 3 sets (Cold Storages / Ripening Chambers / Integrated Pack Houses, etc.,) along with the check list duly signed

by the DHSO, preliminary inspection report and DMC approval. If any documents are not submitted proper justification has to be given for not submitting the documents.

7) As the bank consent letter, bank appraisal report and affidavit are most essential documents, the DHSO shall verify these documents with originals and DHSO shall attest the duplicate copies before submitting the project proposals to this office.

### 3. Issue of Administrative Sanction:

The proposals submitted by the DHSOs shall be referred to the 3rd party for Techno – Economic Viability study. The technically feasible and viable projects are placed before State Level Executive Committee (SLEC). The Projects approved by SLEC shall be accorded administrative sanction by DoH, TS, Hyd.

### 4. After Issue of Administrative Sanction and Execution of The Project

1) DHSOs have to inform the suggestions / remarks given by the technical consultant in techno economic viability report to the promoter and confirm the compliance of the same to head office.
2) Periodical inspection at different stages of execution.
3) DHSOs to recommend for constitution of JIT after completion of civil works & installation of machinery for release of 1st instalment & after commercial commencement of project for release of 2nd instalment.
4) DHSO to inform the promoters for taking up of energy audit after the unit is completed. Energy audit shall be taken up by the certified energy auditors by Bureau of energy efficiency Ministry of Power (GOI).
5) DHSO has to forward the energy audit report to State cell along with 2nd instalment subsidy release proposals.

### 5. Joint Inspection

1) It is the responsibility of the DHSO to coordinate with all the members as constituted in the team for conducting joint inspection.
2) The relevant proformas shall be properly filled and subsidy has to be recommended for release.

### 6. MONITORING

The DHSO shall periodically visit and inspect the unit to see that whether the unit is being utilized for the purpose for which it is sanctioned.

## 7. Time Frame for Implementation of PHM Projects

| Sl.No. | Component | No. of days |
|---|---|---|
| 1. | Verification of project proposal with check list | 10 days from the date of receipt of proposal |
| 2. | Intimation to the promoter if all documents are not submitted | |
| 3. | Inspection by HO / DHSO | |
| 4. | Obtaining required documents from if any promoter as per check list | Within 7 days after verification of the application |
| 5 | Application form filing in SURAKSHA (if) | Within 7 days after getting application form with full details |
| 6. | Obtaining DMC approval | |
| 7. | Forwarding to State cell | Within 2 days after obtaining DMC approval |
| 8. | Techno Economic Viability Study by the Technical consultant | Within 15 days |
| | After obtaining Techno Economic Viability Report – Project to be placed in SLEC. | |
| 9. | **After the project is approved in SLEC of State, the administrative sanction order shall be issued.** | |
| | Periodical inspection by DHSO | Monthly intervals |
| 10. | **After completion of the project (After the promoter has taken up all suggestions given by technical consultants in Techno Economic Viability Report and after the energy audit is completed)** | |
| 11. | DHSO to recommend for constitution of joint inspection | Within a week after completion of civil works & machinery installation. |
| 12. | After joint inspection team is constituted DHSO to coordinate with all the members and arrange for joint inspection | Within 7 days after constitution of joint inspection. |
| 13 | Submission of release proposals along with joint inspection report & DMC approval for 1st instalment subsidy | Within a week after completion of joint inspection |
| | **After commercial commencement of the project** | |
| 14. | DHSO to recommend for constitution of joint inspection | Within a week after commercial commencement of the project |
| 15. | After joint inspection team is constituted DHSO to coordinate with all the members and arrange for joint inspection | Within 7 days after constitution of joint inspection. |
| 16. | Submission of release proposals along with joint inspection report & DMC approval for 2nd instalment subsidy | Within a week after completion of joint inspection |

## PATTERN OF ASSISTANCE

| Sl. No | Component | Unit cost | Pattern of Assistance |
|---|---|---|---|
| 1 | Pack House | Rs.4.00 lakhs | 50% of the total cost i.e., maximum Rs. 2.00 Lakhs |
| 2 | Cold storage units Type 1 - basic mezzanine structure with large chamber (of >250 MT) type with single temperature zone | Rs. 9600/MT, (max 5,000 MT capacity) Rs. 480 Lakh | Credit linked back-ended subsidy @ 35% of the cost of project in general areas for individual entrepreneurs. Rs. 168 Lakh |
| 3 | Cold Rooms (staging) | Rs. 52 lakhs per unit | 35% of the total cost i.e., Subsidy Rs.18.20 lakh/unit |
| 4 | Ripening chamber | Rs. 1.00 lakh/MT. (max 300 MTs per beneficiary) | Credit linked back-ended subsidy @ 35% of the capital cost of project in general areas for a maximum of 300 MT per beneficiary. |
| 5 | Low-Cost Onion Storage Structure (25MT) | Rs. 2.50 lakh per Unit | 50% of the total cost i.e., Subsidy Rs 1.25 Lakh per unit |
| 6 | Technology induction in Cold chain, Add on for CA & Modernization - Alternate technology - Solar PV panels/ Solar thermal sys | Maximum of Rs. 250 lakhs per project | Credit linked back-ended subsidy @ 35% of the cost. |
| 7 | Solar Crop Dryer - 70 Kg | Rs. 2.50 lakh/unit max. 5 units per beneficiary | 40% Assistance Rs. 1.00 Lakh |
| 8 | Solar Crop Dryer – 100 kg | Rs. 3.50 lakh/unit max. 5 units per beneficiary | 40% Assistance Rs. 1.40 Lakh |
| 9 | Preservation Unit | Rs. 2.00 Lakh/unit | 50% Assistance Rs. 1.00 Lakh |

## STEPS TO BE FOLLOWED (PROJECT WISE):

### Cold storages / Ripening chambers

- The project proposals shall be in accordance with technical standards of MIDH www.nhm.nic.in/ www.midh.gov.in -> revised guidelines -> technical standards for cold storages.

- As per the directions of the MIDH the projects shall be recommended as per the following component wise cost.

| Sl.No | Item | % of the project cost (range) |
|---|---|---|
| 1 | Civil construction | 50-55 |
| 2 | Thermal insulation | 10-15 |
| 3 | Refrigeration system | 20-25 |
| 4 | Electrical system | 10-15 |

- The DHSO shall obtain the coefficient of performance sheet in respect of electricity / refrigeration load from promoter and submit the same to State cell for conducting energy audit by the technical consultant and also DHSO shall see that data logger / PLCs are installed by the promoter as mentioned in technical standards
- As the following documents are mandatory the DHSO shall obtain the same for seeking techno viability advice before placing the project in SLEC:
  1. Heat load calculation sheet during loading period, pull down period, holding period in accordance to technical standards and guidelines duly certified by the engineer.
  2. Detailed coefficient performance sheet during peak load, holding period and lean period duly certified by the engineer.
  3. Layout of the proposed cold storage unit in accordance to the statutory building by laws and building codes and standards duly approved by a registered architect and structural engineer.
  4. Technical data sheets of each equipment namely compressors, condensers, cooling towers, Air cooling units giving general layout, dimensions, material of construction, rated capacity, operating parameters and COP duly certified by respective equipment manufactures with respect to relevant codes and standards.

- The DHSO shall also see that additional compressors and humidifiers are installed in multi chambered Cold Storage to have at least 10% of space for storage of Fruits & Vegetables, as most of the cold storages are proposed for storing chillies, tamarind and agriculture produce. The non-providing of space in cold storage for storage of fruits &vegetables is being pointed out in almost all Techno Economical Viability Study reports.
- The project proposal received in State cell from the DHSO with all the above required documents shall be forwarded to the technical consultants for Techno economic Viability study.
- The project proposals that are technically and economically viable shall be placed before the SLEC for approval.
- In principal sanctions / administrative sanctions shall be issued to the projects that are sanctioned by the SLEC.
- The DHSOs after receiving the In principal sanctions, shall inspect the site periodically and to inform the suggestions / remarks given by the technical consultant in techno economic viability report to the promoter and confirm the compliance of the same to head office.
- The payment of back-ended subsidy shall be made in 2 installments. First installment shall be released after receiving satisfactory Joint Inspection Report (JIT) report of completion of civil works and installation of machinery/equipment as per technical standards. The second installment shall be released by SHMs after receiving satisfactory JIT report for project completion and commencement of commercial production.
- The Joint Inspection Team shall comprise of DHSO, HO Concerned, representative from lending bank, technical expert (TSG member), Sr. Officer from Head office and representative from 3$^{rd}$ party.
- The promoter / DHSO/ Banker shall scrupulously the follow the terms & conditions communicated along with administrative sanction proceedings & release proceedings.
- After completion of the project, the DHSO shall recommend through a letter for joint inspection of the project along with bank disbursement statement / completion letter from Banker.
- The DHSO shall submit the proposals for constitution of joint inspection team for 1$^{st}$ installment subsidy after completion civil works and machinery installation.

- The DHSO to coordinate the JIT and submit release proposals along with joint inspection report in format -V (A) (CS), V (B) (CS), V (C) (CS), V (D) (CS) & V (E) (CS) and DMC approval.
- Basing on the release proposals of the DHSO concerned the State cell shall release 1st installment subsidy to the subsidy reserve fund account of concerned bank of the promoter.
- **DHSO shall ensure that promoters shall allow 20% of horticulture produce of the concerned district farmers.**
- The DHSO shall submit the proposals for constitution of joint inspection team for 2nd installment subsidy after commercial commencement of the unit and energy audit.
- The DHSO to coordinate the JIT and submit release proposals along with joint inspection report in format -V (F) (CS) along with energy audit report, and DMC approval.
- Basing on the release proposals of the DHSO concerned the State cell shall release 2nd installment subsidy to the subsidy reserve fund account of concerned bank of the promoter.

**Terms & Conditions:**

1. The project shall have clear cut backward linkages to provide assured market to the producers.
2. The promoter shall ensure that project Cold Storage/ Ripening Chamber shall be as per technical standards stipulated by the Department.
3. The Banker's letter shall have details of term loan sanctioned and disbursed, statement of term loan account and that no other subsidy was availed for the same project.
4. The DHSO shall forward the letter of the Banker after verification of the project and satisfying himself in all respects regarding establishment of the project.
5. The subsidy is purely credit linked and back – ended.
6. The payment of back-ended subsidy shall be made in 2 installments. First installment shall be released after receiving satisfactory Joint Inspection Report (JIT) report of completion of civil works and installation of machinery/equipment as per technical standards. The second installment shall be released by SHMs after receiving satisfactory JIT report for project completion and commencement of commercial production. The Joint Inspection Team shall comprise of members from lending bank, technical expert, SHM and District Administration.

7. The project shall be successfully completed according to the terms and conditions of the loan / as per the approved project report and technical standards prescribed by the MIDH. The release is subject to the strength of the joint inspection report, norms & term loan etc., as the case may be and as per the availability of funds.
8. The promoter shall not claim subsidy from any other State / Central Government dept./agency/authority/other for the same unit. The Department shall initiate recovery proceedings under RR Act. If there is any deviation to this condition.
9. Tending Bank shall submit the utilization certificate to the State Horticulture Mission after utilization of subsidy released.
10. The subsidy assistance released by State Horticulture Mission to Bank shall be kept under separate head “subsidy reserve account with a tenure not less than 3 years”. The adjustment of subsidy shall be on the pattern of back ended subsidy wherein the full project cost including the subsidy amount but excluding the margin money contribution from beneficiary shall be disbursed as loan by the banks. The repayment schedule shall be drawn on the loan amount in such a way that the subsidy amount is adjusted after the bank term loan portion (excluding subsidy) is liquidated.
11. The subsidy admissible to the borrower under the scheme shall be kept in the subsidy reserve fund A/c – borrower – wise in the books of the concerned financing bank. No interest shall be applied on subsidy portion by the bank. The balance lying to the credit of the subsidy reserve fund A/c shall not form part of demand and time liabilities for the purpose of SLR/CRR. Instructions issued by the RBI from time to time shall be followed.
12. The concerned banker shall send the Bank Statement of the firm at every six months and If the unit is cancelled for any reasons thereof within the stipulated time, (minimum 10 years) after receipt of total subsidy amount from the Department the banker shall return the amount to State Horticulture Mission.
13. The release of subsidy is subject to CA certificate, valuation report, actual expenditure, receipts & inspection etc.,
14. In case if the Bank declares the term loan account as NPA due to nonpayment of loan by the borrower or the project turning nonperforming assets during term loan re-payment period shall make the firm/promoter in-eligible for getting back ended subsidy and the same is liable to be refunded by the concerned bank to SHM account.
15. If the promoter intends to dispose the project with in a period of 10 years, he has to repay the subsidy back to MIDH.

16. Change of Management / Proprietary ship of the project shall not be allowed without prior consent or permission of the MIDH.
17. The unit shall be utilized for the same activity for which assistance is released for the economic period of 10 years. In case, if the unit is misused for carrying on any activity other than the horticulture activities under the scheme, the promoter /Director is liable for any action deemed fit including recovery of the assistance amount.
18. The promoter shall adhere to the advices given in the Techno Economic Viability report for release of subsidy.
19. Mission Director & Director of Horticulture, Telangana Hyderabad reserves the right to modify, add or delete any term/condition without assigning any reason thereof.
20. The promoter has to submit Affidavit to that effect i.e., the unit is utilized for the purpose for which it is meant and in case any kind of misuse or irregularities are observed in due course of period, the Commissioner of Horticulture has right to recover the subsidy released.
21. In case of any discrepancy/ dispute, the decision of the Mission Director & Director of Horticulture is final.

## 1. PACK HOUSES

**Pattern of Assistance:**

| Sl. No. | Component | Unit cost | Pattern of Assistance |
|---|---|---|---|
| 1 | Pack Houses | Rs.4.00 lakhs | 50 % subsidy up to Rs. 2.00 Lakhs per unit. Maximum one unit per beneficiary |

**Specifications and Cost norms for Pack house:**

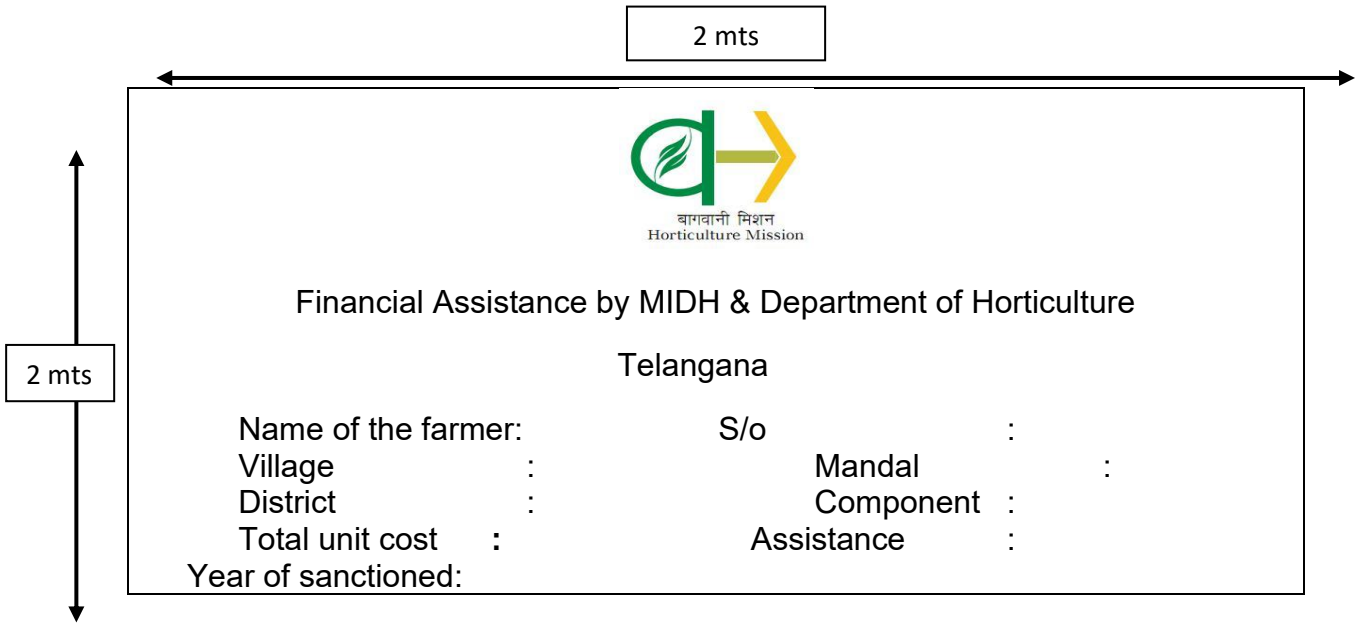
| | | Specifications/Details | Qty | Units | Sl. No | Detail of structure |
|---|---|---|---|---|---|---|
| A | Land | Near road with electric facility | 500 | yds | | Farmer's Own |
| **B** | **Expenditure Item** | | | | | |
| **1** | **Civil Structure** | | | | | |
| 1.1 | Site levelling etc | Levelling land and to make it motorable inside the premises | 500 | yds | 18 | 9000 |
| 1.2 | 30X20' Packing Hall | 30X20 ft with GI/Asbestos roof, Hard cement flooring, Windows doors of country wood. | 600 | sft | 425 | 275000 |
| **2** | **Mechanical** | | | | | 0 |
| 2.1 | Packing /grading Table | 4'X8' of GI or SS material, with 100mm side protection to stop roll off and with provision to drain water | 1 | Nos | 18000 | 18000 |
| 2.2 | Washing sheets (HDPE) | Of plastic of not less than 5' length and 2.6' ft width | 2 | Nos | 3750 | 7500 |
| 2.3 | Weighing Machine | To weigh upto 300 kgs with an accuracy of + or - 0.1 Kg with atleast 400X 600mm plat form | 1 | Nos | 8000 | 8000 |
| 2.4 | Chemical Treatment Washing Tubs (Cement/ Plastic) | | 3 | Nos. | LS | 4000 |
| 2.5 | Desaping Units (for Mango growers only) | 1.2 – 1.5mtr.(L)x0.8 – 1.0mtr.(W) x20cm (H);GI rods covered with ½"PVC Pipes | 6 | Nos. | 1500 | 9000 |
| **3** | **Electrical** | | | | | |
| 3.1 | Meter with connection | Single Phase or three phase connection including deposit | 1 | No | 8500 | 8500 |
| 3.2 | Electrical Wiring with fuses, switches, holders, bulbs, fans etc. | 5 Tube lights, 3 Fans with 2 Hrs. back up | 1 | Set | 10000 | 10000 |
| **4** | **Water System** | | | | | |
| 4.1 | Water tank with support | Plastic "Sintex" or equivalent or cement based located at height either outside or with separate | 1 | Nos | 12500 | 12500 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | support of at least 2000 ltr capacity | | | | |
| 4.2 | Watering pipe | Running parallel to packing hall with at least three taps and flexible water pipe with shower arrangement of 50' length minimum. | 100 | Rft | 25 | 2500 |
| 5 | Other assets Small office table, three chairs, almairah, Wooden showels | | 1 | LS | 8000 | 8000 |
| 6 | Plastic Crates | 40 Ltrs. Capacity (25 kgs.) | 100 | Nos. | 300 | 30,000 |
| 7 | Inverter | | | 1 | 8000 | 8000 |
| | | | | | TOTAL | 4,10,100 |

**LIMITED TO Rs.4,00,000/- (Rupees Four Lakhs only)**

**TERMS AND CONDITIONS:**

1. The applications along with project report, relevant documents and DMC approval shall be submitted to the head office for administrative sanction.
2. The farmers cultivating horticulture crops are eligible for availing assistance under the said component. Nevertheless, priority may be given to the farmers cultivating the crop identified under One District One Focus Produce programme in their respective district'.
3. The farmer shall display the board and place in front of the Pack House, Banners/Flexes are not to be permitted. The Logo of Mission for Integrated Development of Horticulture and the matter mentioned below:




4. The project shall be implemented within a period of six (06) months from the date of in-principle sanction and if the project is not completed within the above stipulated period the project is deemed to have been cancelled.

5. The farmers shall inform the completion of the Pack house to the concerned DHSO in writing along with photograph.
6. After establishment of Pack house, the committee consisting of DHSO, MIE, the concerned HO, shall inspect the pack house in presence of farmer and submit the joint inspection report in the prescribed format along with the enclosures therein.
7. **The subsidy shall be released to the beneficiaries accounts only subject to the actual expenditure, receipts i.e., Total unit cost and joint inspection reports.**
8. The payment shall be made after the project has been successfully installed basing on the strength of the joint inspection report and as per the availability of funds.
9. Undertaking from the farmer that the Pack house shall be utilized for the purpose for which it is sanctioned / as per the project i.e. for horticulture produce only.
10. The promoter shall not claim subsidy from any other Government agency for the same unit. The Department shall initiate recovery proceedings under RR Act. If there is any deviation to this condition.
11. In case of any discrepancy /dispute the decision of the Mission Director & Director of Horticulture is final.

## APPLICATION FOR AVAILING ASSISTANCE / SUBSIDY UNDER MIDH (COMPONENT: PACK HOUSE)

Name of the Scheme: Post Harvest Management

| | | |
|---|---|---|
| 1 | Name of the Farmer | : |
| 2 | Father / Husband Name | : |
| 3 | Caste (SC/ST/BC/OC) | : |
| 4 | Address: | : |
| | Phone / Cell No.: | : |
| 5 | Land records with Extent in Acres / Ha. (Copy of Pass Book / | : |
| 6 | Source of Irrigation (Open well / Bore well / Canal) | : |
| 7 | Name of the Financing Bank, Loan Amount Proposed | : |
| 8 | Whether any Govt. Subsidy availed previously | : |
| 9 | Any other relevant information | : |

**Declaration**

I, declare that the particulars furnished above are true to the best of my knowledge and I promise that the benefit obtained from State MIDH Cell shall be used for the purpose for which it is given and in case of misuse I am liable for any action deemed to be fit by Govt. of TS including recovery of the subsidy amount with 12% interest to the Government.

Enclosures:

a) Affidavit
b) Pattadar Pass Book
c) Detailed Project Estimate by Civil Engineer (Regd. No. along with Seal)

Signature of the Farmer /

Entrepreneur.

Recommendations of the Horticulture Officer :

Horticulture Engineer (MIE) Horticulture Officer DHSO

**FORMAT TO CONDUCT FINAL AND JOINT INSPECTION OF PACK HOUSE BY THE COMMITTEE UNDER POST HARVEST MANAGEMENT COMPONENT OF MIDH, TG.**

**Name of the Unit: .....  Place: .....**
**District: .....**

| As per project report | | | | As per the inspection and actual investment | | | |
|---|---|---|---|---|---|---|---|
| *Details* | *Specifications /Details* | *Qty* | *Total Cost (Rs)* | *Item* | *Specifications* | *Qty* | *Expenditure (Rs.)* |
| **Civil Structure** | | | | | | | |
| Site levelling etc | Levelling land and to make it motorable inside the premises | 500 | 9000 | | | | |
| 30X20' Packing hall | 30X20 ft with GI/Asbestos roof, Hard cement flooring, Windows doors of country wood. 6 windows, 2 double doors | 600 sft | 275000 | | | | |
| **Mechanical** | | | | | | | |
| Packing /Grading Table | 4'X8' of GI or SS material, with 100mm side protection to stop roll off and with provision to drain water | 1 | 18000 | | | | |
| Washing sheets (HDPE) | Of plastic of not less than 5' length and 2.6' ft width | 2 | 7500 | | | | |
| Weighing Machine | To weigh up to 300 kgs with an accuracy of + or - 0.1 Kg with at least 400X 600mm plat form | 1 | 8000 | | | | |
| Chemical Treatment Washing Tubs | | 3 | 4000 | | | | |
| Desaping Units (for Mango) | 1.2 – 1.5mtr.(L)x0.8 – 1.0mtr.(W) x20cm(H);GI rods covered with ½"PVC Pipes | 6 | 9000 | | | | |

| As per project report | | | | As per the inspection and actual investment | | | |
|---|---|---|---|---|---|---|---|
| ***Details*** | ***Specifications /Details*** | ***Qty*** | ***Total Cost (Rs)*** | ***Item*** | ***Specifications*** | ***Qty*** | ***Expenditure (Rs.)*** |
| **Electrical** | | | | | | | |
| Meter with connection | Single Phase or three phase connection including deposit | 1 | 8500 | | | | |
| Electrical Wiring with fuses, switches, holders, bulbs, fans etc. | 5 Tube lights, 3 fans, with 2 hrs backup | | 10000 | | | | |
| **Water System** | | | | | | | |
| Water tank with support | Plastic "Sintex" or equivalent or cement based located at height either outside or with separate support of at least 2000 litres capacity | 1 | 12500 | | | | |
| Watering Pipe | Running parallel to packing hall with at least three taps and flexible water pipe with shower arrangement of 50' length minimum. | 100 | 2500 | | | | |
| Other assets Small office table, three chairs, almairah, Wooden showels | | | 8000 | | | | |
| Plastic Crates | 40 Ltrs. Capacity (25 kgs.) | 100 | 30000 | | | | |
| Inverter | | | 8000 | | | | |
| | **Total** | | **4,10,000** | | | | |

**Certificate:**

1) This is to certify that Sri./ Smt. _____ has established Pack House as per project report and norms of MIDH.

2) This is to certify that all the original purchase bills of the items mentioned above have been verified and found correct.

3) This is to certify that Sri./ Smt. _____ is eligible to avail subsidy of Rs. _____/-

4) The subsidy amount of Rs. _____/- may be released.

**Promoter** **Horti. Engineer (MIE)** **HO** **DHSO**

## 2. COLD ROOMS (STAGING)

**Pattern of Assistance:**

| S. No | Item | Max permissible Cost | Pattern of Assistance |
|---|---|---|---|
| 1 | Cold Rooms (Staging) | Rs. 52.00 lakhs per unit | Credit linked back ended subsidy @ 35% of the total cost i.e., Rs. 18.20 lakh/unit |

***Component Definition:***

This component is an insulated and refrigerated chamber which is a necessary combination for Pre-Cooling Unit and serves as a transient storage, while allowing the pre-cooler to be utilized for next batch load of incoming produce.

***Component Description***

A maximum admissible cost norm of Rs.52 lakh/unit for a storage capacity of 30 MT is applicable for each beneficiary. A pro-rata cost shall be considered in proportion to other capacities or design options.

The component "Cold room (staging)" includes:

1. An insulated room of 100$m^3$ volume - capacity to store 30MT
2. Associated refrigeration equipment.
3. Staging area - adjoining enclosed area to load vehicle for dispatch.

The component has been kept separate but shall be appraised only when attached to a pre- cooling unit. The beneficiary shall be advised that the cold room (staging) necessitates the following:

1. Other preconditioning facility (integrated pack-house).
2. An appended Pre-cooler unit.
3. An ante-room for staging.

The design specifications of such cold rooms are similar to a cold store, with the refrigeration design to suit humidity and temperature ranges for horticulture produce. Where pre-coolers are built appended to an existing cold store, the cold store itself serves this purpose.

## 3.COLD STORAGE UNITS

**Pattern of Assistance:**

| Sl. No. | Component | Unit cost | Pattern of Assistance |
|---|---|---|---|
| 1 | Cold storage units Type 1 - basic mezzanine structure with large chamber (of >250 MT) type with single temperature zone | Rs. 9600/MT, (max 5,000 MT capacity) Rs. 480 Lakh/Unit | Credit linked back-ended subsidy @ 35% of the cost of project in general areas and 50% of cost in case Hilly & Scheduled areas for individual entrepreneurs. Rs. 168.00 lakh/ Unit |

Under MIDH norms a beneficiary may apply for construction and expansion of cold storages up to 10000 MT storage capacity. State Horticulture Missions shall accept projects of capacity 5000MT and below and National Horticulture Board shall accept projects of capacity larger than 5000MT. The cost norms vary depending on scale of storage capacity.

For the purpose of these guidelines, 3.4$m^3$ (cubic meter) or 120 cubic feet of temperature-controlled storage space created shall be equivalent to 1 MT (metric ton) of storage capacity, irrespective of the product stored.

**Cold storage type 1:** Are cold stores with large chambers (>250MT each), each designed for single product storage. These types of stores are designed for bulk long-term storage (potato, spices, pulses, etc.). This storage has handling system for unpackaged or soft packaged produce, or produce stored in bags or bins (non-retail packaging). Produce on exiting such stores have to undergo bulk shipping to processing plants or subsequent packaging process for making consumer retail packages. These are seen to be primarily brick & mortar structures with multi- layered fixed or mezzanine floors. They incorporate small handling area or open sheds designed for one-time seasonal loading (during harvest season), and for smaller volume off-loading to serve specific buyer demand. They shall incorporate air monitoring and ventilation mechanism for controlled air replenishment, enabling them to counter produce induced modified atmospheric parameters inside the storage chambers.

he extant guidelines, standards and data sheets, as published by NHB on behalf of Department of Agriculture and Cooperation, for cold storage projects have been incorporated.

## INDEX for Checklist & Formats for Cold Storages

| Sl.No | Item | Annexure/ Format Number |
|---|---|---|
| 1 | Check List For Projects For Cold Storage & Ripening Chamber | Annexure-I |
| 2 | APPLICATION FORMAT for Cold Storage / Ripening Chamber | Format - I |
| 3 | SYNOPSIS | Format – I (b) (CS/RC) |
| 4 | AFFIDAVIT (Rs. 100/- Stamp Paper ) | Format – II (CS/RC) |
| 5 | Declaration by Engineer | Format – III (CS/RC) |
| 6 | Preliminary (Inspection Report) while submitting project to State MIDH Cell. | Format – IV |
| 7 | Joint inspection (Release of First Installment) | Format – V (A) (CS) |
| 8 | Component wise releases made by the Banker for cold storage | Format – V (B) (CS) |
| 9 | joint inspection by the committee for cold storage under Post Harvest Management component of MIDH, Telangana | Format – V (C) (CS) |
| 10 | Subsidy Calculation Sheet | Format – V (D) (CS) |
| 11 | Detailed Report on Cold Storage at the time of final and Joint Inspection | Format- V – (E) (CS) |
| 12 | Joint inspection report 2nd installment | Format- V – (F) (CS) |
| 13 | Basic Data Sheet | Format – VI |

**Annexure-I**

## CHECK LIST FOR PROJECTS FOR COLD STORAGE & RIPENING CHAMBER

| Sl. No. | DESCRIPTION | REMARKS |
|---|---|---|
| 1 | Application Form (Format – I) along with Synopsis in format – I (b) CS/RC | |
| 2 | Basic Data Sheet with Complete Technical Specifications (Format – VI) | |
| 3 | Detailed Project Report as Per MIDH Guidelines | |
| 4 | Partnership Deed | |
| 5 | Firm Registration Certificate | |
| 6 | Bank Sanction Letter | |
| 7 | Bank Appraisal Letter | |
| 8 | Approval from Gram Panchayat | |
| 9 | Approval from Pollution Control Board | |
| 10 | SSI registration certificate | |
| 11 | Fire Department approval with Drawings | |
| 12 | Pan Card Copy of firm | |
| 13 | Electricity approval | |
| 14 | KYC documents of all the partners | |
| 15 | GST REGISTRATIONS | |
| 16 | Land Conversion | |
| 17 | DMC Approval (District Mission Committee) | |
| 18 | Affidavit (Format –II) | |
| 19 | Land Documents (Sale Deed / Lease Deed )/ Pattadar pass book copy | |
| 20 | Declaration by Engineer (Format –III) | |
| 21 | NOC from NABARD / NHB/ APEDA/ DIC / SFC and MFPI | |
| 22 | CA Certificate | |
| 23 | Insurance copy of the firm | |
| 24 | Preliminary inspection report | |

**Format - I**

## APPLICATION FORMAT

**Cold Storage / Ripening Chamber**

## FORMAT FOR SUBMISSION OF PROJECT BASED PROPOSALS POST HARVEST MANAGEMENT BY PRIVATE SECTOR UNDER MIDH

1. Name of Project :
2. Type of Activity :
3. Objectives :
4. Purpose (Details of crops stored in cold Storages / Ripening Chamber are also to be given) :
5. Location of the project with address :
a) Address for correspondence :
b) General area :
c) Hilly/Tribal area :
6. Constitution :

(Date of incorporation and relevant law along with a copy of articles and memorandum of association, bylaws, partnership deed and registration certificate whichever is applicable. Documentary proof regarding authorized / paid up capital and promoters contribution.)

(a) Public Ltd. Company :
(b) Private Ltd. Company :
(c) Registered Society :
(d) Association :
(e) Federation :
(f) Producer Company :
(g) Proprietorship firm :
(h) Partnership concern :

7. Management :

8. Brief background of promoters :
a) Category / Caste :
b) Bank name & branch and date of sanction:
9. Cost of Project (Rs in lakhs) :
(a) Land- (if purchased new along with documentary proof)
(b) Building :
(c) Plant & Machinery :
(d) Contingencies :
(e) Miscellaneous fixed assets :
(f) Working Capital margin :
(g) Pre operative exp.

---

Total :

---

10. Means of Finance

| | | |
|---|---|---|
| (a) Promoter Share | : | |
| (b) Bank Term loan | : | |
| (c) Subsidy | | : |
| (d) Quasi equity | | : |
| (e) Unsecured loan | : | |
| | | --- |
| Total | | : |
| | | --- |

11. Details of Cost of Plant & Machinery/equipment supported by quotations.

12. Details of the Building construction and the cost duly certified.

13. Area of Operation with special reference to MIDH Districts to be covered.

14. Availability of raw material, name of the cluster and District along with the major crops.

15. Backward linkages with farmers with reference to either providing services or purchase of raw material.

16. Forward linkages -Analysis of domestic and export markets, tie up made for sale of Produce and branding aspect.

17. No. of farmers/ orchardist to be benefited.

18. SWOT Analysis.

19. Financial Analysis – IRR, NPW, Cost benefit Ratio, Breakeven point, DER, DSER, Projected balance sheet etc.

20. Insurance of the fixed assets

21. Certificate from Pollution Control Department.

22. Name of the sponsoring bank along with the details of Techno-economical appraisal reports, copy of sanction letter and Detailed Project Report (DPR) as submitted to bank.

23. Affidavit of Rs. 100/- regarding Non-availing of subsidy from any other Central/State Govt. Departments.

24. Social benefits with special reference to employment generation.
    (a) Direct employment
    (b) Indirect employment
    (c) Women/S.T./S.C. employment

25. Details of the sustainability of the project with special reference to its

Capacity to generate income since only one time grant is admissible.

26. Implementation schedule.

27. Amount of subsidy sought.

28. Production cluster should be identified near the existing infrastructure for pre harvest and post harvest, market and processing, Agri Export Zones (AEZ).

29. Linkages with infrastructure created by the private/ corporate sector in And around the clusters. A write up on the initiatives of the linkages between MIDH clusters and private sector initiative to be brought out.

30. Marketing arrangements for surplus produce inside and outside State/Country to be indicated.

31. List of machinery and equipment.

**Signature of the promoter**

Recommendations of the District Horticulture & Sericulture Officer_____.

**DHSO**

**Note: Synopsis to be enclosed in format no. I(b)**

**Format – I (b) (CS/RC)**

**PROPOSALS FOR ESTABLISHMENT OF COLD STORAGES**

**AT _____ DISTRICT _____**

**SYNOPSIS**

**1) Name of the Component & :**

**a) Sub-Component Applied for :**

**2) Title with Firm Details :**

**3) Purpose :**

**4) Name of the Proprietor/ Promoter/ Partnership/ Pvt. Ltd. Company/ Society :**

**5) Details of Project Cost:**

a) Bank Term Loan **:** Rs. Lakhs

b) Other Loan **:** Rs. Lakhs

c) Capital **:** Rs. Lakhs

---

**Total Project Cost : Rs. Lakhs**

---

**6) Status of the Project:**

a) Completed/ Under Construction**:**

b) If Under Construction Stage

Date of Commencement **:**

Probable date/ month of completion**:**

**7) Breakup of the Project Cost:**

| | | | |
|---|---|---|---|
| a) Civil Works | : | Rs. | Lakhs |
| b) Plant & Machinery & Other | : | Rs. | Lakhs |
| | | --- | |
| **Total** | : | **Rs.** | **Lakhs** |
| | | --- | |

**8) List of Documents:**

a) Approval of the DHM (Dist.Collector) :
b) Detailed project report (5copies) :
c) Bank Approval Memorandum :
d) Affidavit :
e) Quotations for Supply of Plant & Machinery :
f) Details of Civil & Technical Works Certified by Chartered Engineer :
g) Photos of unit :

**9) Details of Estimated Cost & Subsidy as Per MIDH Norms:**

a) Estimated cost : Rs. Lakhs /Unit

b) Subsidy : Credit linked back ended subsidy @ 35% of the capital cost i.e., Rs. Lakhs/Unit.

Signature of the Promoter

**Format – II (CS/RC)**

## AFFIDAVIT (Rs. 100/- Stamp Paper)

I / We _____ ( Name of the Promoter / Director ) son of _____ ( Father's Name ) resident of _____ ( residence address ) do hereby solemnly affirm and declare here under.

1) That I am the director of _____,( name of the beneficiary ) having its registered office at _____, ( office address of beneficiary ) and am fully aware of the facts relating to the setting up the project at _____ ( location of the project ) for _____ ( activities to be undertaken by project ) and the application made to MIDH for availing assistance under Developmental Schemes - _____

2) That the terms and conditions of the scheme of MIDH under which an application has been made by the applicant have been properly read and understood by me and I affirm that the project / proposal / scheme comply with the terms and condition of MIDH and the application has been made in the correct applicable scheme.

3) That the proposed activities to be undertaken by the project / proposal / scheme are covered under the above scheme of MIDH and no part of the scheme / infrastructure of the project is designed or assigned to be used for any activity other than the activities specified in the application at present or in the near future.

4) That the information provided in the application for availing assistance under developmental schemes - _____ is true and correct to the best of my knowledge and belief. The estimates of the cost of project / proposal / scheme, financial viability and operating results have been worked out / computed as per the rule and generally accepted principles and norms in this regard.

5) No Subsidy / grant – in – aid has been availed by the promoters / directors / partners / proprietors for this new project and component thereof from central Govt. or any its agencies.

6) I / We also solemnly affirm that the proposed activity in the application for availing assistance under development schemes - _____ is a completely new activity and not a pre – existing activity or any component thereof and further I assure that the unit will be utilized for the same activity for which the assistance is sought from the MIDH through State MIDH Cell of Telangana Govt. for the economic period of 15 years. In case, if the unit is misused I am liable for any action deemed to be fit by the Govt. of Telangana including recovery of the assistance amount extended. The information furnished in the application dated _____ is true to the best of my knowledge and belief and nothing material has been concealed.

7) In case of concealment of any facts in this regard, the MIDH would have right to cancel my application out right at any stage.

8) I will display a sign board depicting “Department of Horticulture” (MIDH, Assisted Project).

9) The release of subsidy is subject to actual expenditure, receipts, inspection, MIDH norms etc., In case of any discrepancy / dispute the decision of the Mission Director & Director of Horticulture is final.

10) I agree and resolve that the department reserves the right to modify, add or delete any term/ condition without assigning any reason thereof and shall also have right to pre and post inspect / monitor the project and verify the related records at any time during the economic life of the project by the concerned officers.

**DEPONENT VERIFICATION**

Verified on solemn affirmation at _____ that the content of the above affidavit are true to the best of my knowledge and belief and nothing material has been concealed.

**DEPONENT / COMPETENT AUTHORITY**

**(to be Signed by Notary with seal)**

**Format – III (CS/RC)**

## DECLARATION BY ENGINEER

**I _____, R/o. _____- certify that:**

1. That I am a graduate engineer and have adequate experience / expertise in designing, Constructing and commissioning cold stores, insulation & cooling system and cold chain infrastructure equipment.
2. That a copy of my graduation / post graduation certificate of B.E. / B. Tech / M. Tech is enclosed and shall form part of my certification and declaration.
3. That I am the project / Technical Consultant and have been hired by the project promoter of M/s. _____ to design, conceptualize and prepare the project DPR bearing Ref. No.___.
4. That I am fully conversant with relevant codes and standards applicable to the cold chain infrastructure and affirm invariable compliance of the project to the above mentioned prescribed Technical Standards.
5. That I have thoroughly examined notification F. No. 45-64/2010-Hort dated 25.02.2010 for prescribed technical standards w.e.f. 01.04.2010.
6. That I certify that the components of insulation and refrigeration systems in the prescribed format of the technical data sheet conform the ratings and performance of selected equipments and proposed design as per the prescribed Technical Standards w.e.f. 01/04/2010 vide notifications F. No. 45-64/2010-Hort dated 25.02.2010.
7. That I undertake to DHSO to the requirements of confidentiality and non-compete with respect to proprietary information entrusted to me by the promoter/manufacturer of equipment / the Board.
8. That I will assist the Government inspection and regulatory agency during stage inspection of the project and provide any/or all technical clarifications as and when required.
9. That I will furnish a certificate of satisfactory commissioning of the cooling system in conformance to the performance indicators as per the prescribed standards.
10. That in case of any concealment of facts by me in the DPR with respect to invariable compliance to Technical Standards or on any instance of false declaration / certification by me or any part of my declaration is found to be

incorrect, the Board may, in its discretion, take any actions (including legal action) against me as deemed fit and proper.

**IN WITNESS WHEREOF,** the consultant has signed this declaration and certification on this ___ Day of _____ 2018 in the presence of the following witnesses;

**WITNESSES:**

**1.**

**(Sign of the Consultant)**

**With civil stamp**

## BASIC DATA SHEET FOR COLD STORAGES

**Format – VI**

A. Identification

| | | | |
|---|---|---|---|
| Name of Cold Storage | | | |
| Location of Cold Storage | Area / Village | Town | |
| | District | State | |
| Name of Promoter Company / Owner | | | |
| Type of company (Proprietorship / Partnership / Pvt. Ltd / Ltd) | | | |
| Postal address of Promoter | | | |
| | Tel / Fax | Mob. No | E-mail |
| Present activity in brief | | | |
| Name of CEO / MD | | | |
| Name of Manager / Contact Person | | Phone / Mobile No | |

B. Basic Cold Store Design Considerations

i) Commodity Storage Requirements

| | | |
|---|---|---|
| Type of Commodities/Produce | | |
| Ideal / Recommended Storage Conditions<br>– Temperature (DB in $^{O}$C)<br>– Humidity RH (%) Range<br>– Air Circulation (CMH/MT of Produce)<br>– Ventilation (Air Changes/Day)<br>– $CO_2$ Range (PPM)<br>Produce Cooling Rate ( $^{O}$C/day)<br>Freezing Point $^{O}$C<br>– Others | | |
| Cold Chamber Dry bulb (DB in $^{O}$C) | | |
| Cold Chamber RH (%) | | |
| Max Storage period (months) | | |
| Max product temp ($^{O}$C)<br>– at the time of loading | | |
| Daily loading rate (MT/day)<br>– in each cold chamber | | |
| Loading Period (months) | | |
| Pull down rate ($^{O}$C / day) | | |
| Unloading Period (months) | | |
| Daily unloading rate (MT/day)<br>– from each cold chamber | | |
| Ante Room Conditions (T $^{O}$C & RH %) | | |
| Sorting & Grading Area (T $^{O}$C & RH %) | | |
| Special Provisions<br>CIPC treatment for Process Potatoes | | |
| Special Provisions – MA / Ethylene Control / Fumigation/ Fresh Air etc | | |

**ii) Fresh Air / Ventilation System**

| | |
|---|---|
| Brief Description of $CO_2$ Extraction / Ventilation System | |
| $CO_2$ Concentration Control Range (PPM) | |
| Monitoring & Control Instrument<br>– Type<br>– Accuracy | |
| Ventilation Capacity (Max Air Changes/Day) | |
| Design Considerations for Energy Recovery and Preventing Wetting of Produce | |

**iii) Cold Store Chamber Sizing and Capacity**

No. of chambers:

Type : Mezzanine/ Palletized

Max Height of Building

| Details | CSC 1 | CSC 2 | CSC 3 | CSC 4 |
|---|---|---|---|---|
| Total Capacity of Each Cold Store Chamber ( MT) | | | | |
| Internal Chamber Dimensions<br>L x B x H (m) | | | | |
| No. of mezzanine floors<br>X Height (m) per floor | | | | |
| Size &Weight of Bags or Boxes being stored | | | | |
| Total number of Bags/Boxes stored in each Cold Store Chamber | | | | |

**iv) Ante Room & Process Areas**

| Details | Length (m) | Width (m) | Height (m) |
|---|---|---|---|
| Ante Room | | | |
| Sorting & Grading Area | | | |
| Loading / Unloading dock | | | |

**v) Machine Room & Utility Areas**

| Details | Length (m) | Width (m) | Height (m) |
|---|---|---|---|
| Machine Room | | | |
| Office Area | | | |
| Toilets & Changing rooms | | | |
| Any other | | | |

**vi) Building & Construction Details**

Type of construction: Civil/ Pre-engineered Building

| | |
|---|---|
| Type of External walls of cold chambers | |
| Type of Internal / Partition walls | |
| Type of Roof / Ceiling | |
| Type of Internal structure / Racks | |
| Type of mezzanine grating | |
| Types of Lighting fixtures in cold Chambers | |
| Types of Lighting fixtures in Process & Other Areas | |

**ii) Insulation and Vapor Barrier**

Type of Insulation: Insulating Sheets / Metal Skin Composite panels

| Type of Insulation | Wall | | Ceiling / Roof | Floor |
|---|---|---|---|---|
| | External | Internal | | |
| Type of material EPS / Metal Skin PUF Composite Panels / XPS/ PUR, Others | | | | |
| Relevant IS Code | | | | |
| Density ($kg/m^3$) | | | | |
| Thermal Conductivity at +10°C k value ( W/m.K) | | | | |
| Thermal diffusivity m2/h | | | | |
| Water vapour transmission rate, ng/Pa.sm, Max. | | | | |

| | | | | |
|---|---|---|---|---|
| Water absorption after 24h immersion, percentage by mass. | | | | |
| Relevant IS Code of Practice for Thermal Insulation of Cold Store | | | | |
| Total Insulation Thickness (mm) | | | | |
| No. of layers & Thickness / layer (mm) | | | | |
| Type of vapor barrier & thickness (microns) | | | | |
| Type of Bituminous/Sticking Compound | | | | |
| Type of Cladding / Covering/External Finish | | | | |
| Locking/Fixing & Sealing System in case of Metal Skin Composite Panels | | | | |
| Any other info | | | | |

**viii) Cold Store Doors & Air Curtains**

| Type of Insulation | Details |
|---|---|
| No. of Insulated doors | |
| Type hinged / sliding | |
| Insulation Material EPS / PUF / Others | |
| Thickness of Insulation (mm) | |
| Type of cladding | |
| Size of door opening | |
| Provision of Strip curtains – nos. & overlap % | |
| Air curtains, if any | |
| Others | |

**ix) Material Handling**

Proposed Practice: Manual / Semi Automated /Automated

| Procedure | Brief Description |
|---|---|
| Material Handling Procedures & Equipments | |
| Cap of Electric Elevator<br>Rating of motor (kW) | |
| Any other device | |

**x) Grading, Sorting Washing & Packing Line (optional)**

Proposed Practice: Manual / Semi Automated /Automated

| Procedure | Brief Description |
|---|---|
| Process Line | |
| Total Connected Load (kW) | |

Please attach a Plan & Layout of the proposed Cold Store unit in accordance to the Statutory Building By-Laws and BIS Building Codes & Standards duly approved by a Registered Architect and Structural Engineer. The drawings should detail out insulation type, thickness and fixing methodology in sectional details.

**C. Heat Load Calculation of Cooling System – Summary**

| Ambient Conditions | Summer | Monsoon | Winter |
|---|---|---|---|
| Dry Bulb Temperature (°C) | | | |
| Wet Bulb Temperature (°C) | | | |

| Refrigeration Load | | During Loading (kW) | During Pull Down (kW) | During Holding (kW) |
|---|---|---|---|---|
| Transmission Load | | | | |
| Product Load | | | | |
| Internal Load | Lighting load | | | |
| | Occupancy load | | | |
| Infiltration Load | | | | |
| Ventilation/ Fresh Air Load | | | | |
| Equipment Load - Fan motors etc. | | | | |
| Total Load (kW/24 hrs) | | | | |

| | | |
|---|---|---|
| Compressor Operation Hours/Day | Loading Period | |
| | Pull Down Period | |
| | Holding period | |
| Multipliers | Safety Factor | |

| | Defrost Period | | |
|---|---|---|---|
| Total Refrigeration Load | Peak Period | Holding Period | Lean Period |
| Total Load (KW) | | | |

Please attach detailed heat load calculation sheets of the proposed cold store unit in accordance to the prescribed Technical Standards and Guidelines duly approved by a Qualified Engineer.

**Cooling System Design & Equipment Selection**

Cooling System Configuration

| | |
|---|---|
| Type of Refrigerant | Ammonia /Freon /Others |
| Type of System | Direct Exp / Gravity Feed / Overfeed |
| Type of compressor | Reciprocating / Screw / Scroll / Others |
| Type of capacity control | Automatic In steps / Step less |
| Type of condenser | Atmospheric / Evaporative / Shell & Tube / Plate Heat Exchanger / Other |
| Cooling Towers ( if applicable) | FRP Induced Draft / Others |
| Type of cooling coil | Ceiling suspended / Floor Mounted / Others |
| Type of defrosting | Air / Water / Electric / Hot gas |
| Humidification System & Control ( Brief Description) | |

**Compressor Detail**

| Compressor Make & Model | Nos. | Comp. RPM | Operating Parameters Evap. SST. / Cond. Temp ($^{O}$C) | Refrigeration Capacity (KW) | Motor Rating. (KW) | Total Electric Power. (BkW) | Remarks Working /Standby |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |

**Condenser Details**

| Condenser Make & Model | Nos. | Operating Parameters Cond.Temp.(SDT)/ | Condenser Capacity | Electric Fan /Pump Motor Rating | Total Electric | Remarks Working /Standby |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| | | in/out water temp($^{O}$C) &flow (lps) | (kW) | (kW) | Power (BkW) | |
| | | | | | | |
| | | | | | | |

**Cooling Tower Details ( if applicable)**

| Cooling Tower Make & Model | Nos. | Operating Parameters DB & WB Temp, in/out water temp($^{O}$C) | Cooling Tower Capacity(KW) | Fan & Pump Capacity (CMH/LPS) & Motor (kW) | Total Electric Power (BkW) | Remarks Working /Standby |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |

**Air Cooling Units (ACU)**

| ACU Make & Model | Nos. | Operating Parameters Evap. (SST) & TD* ($^{O}$C) | Cooling Capacity (kW) | Air Flow (CMH) & Face Velocity (M/S) | Material of Coil Tubes & Fins | Fin pitch (mm) | Total Fan Electric Power (BKW) |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

(*) TD – Temperature difference between Evap. (SST) $^{O}$C & Return Air (at coil inlet).

Please attach Detailed Technical Data Sheets of each equipment namely Compressors, Condensers, Cooling Towers, Air Cooling Units giving General Layout, Dimensions, Material of Construction, Rated Capacity, Operating Parameters and COP (please note that the Air Cooling Unit data sheet should include heat transfer area, fin spacing, no. of rows, air flow, face velocity, fan static, air throw, Fan Motor BKW/KW, fin spacing, etc ) duly Certified by the respective equipment manufacturers with reference to the Relevant Codes & Standards.

Electrical Instillation

| | |
|---|---|
| Total Connected load (kW) | |
| Estimated power requirement at Peak Load Period (BkW) | |
| Estimated power requirement at Holding Load Period (BkW) | |
| Estimated power requirement at Lean Load Period (BkW) | |
| Capacity of Transformer (KVA) | |

| | |
|---|---|
| (proposed) | |
| Size of Capacitor for power factor correction & their operation | |
| Make & Capacity of standby<br>D.G.Set (KVA) | |

**Safety Provisions**

| | | |
|---|---|---|
| Details of Fire Fighting equipment | Dry | |
| | Water based | |
| Handling Refrigerants & Leaks | Leak Detection | |
| | Handling measures | |
| Safety devices – LP/HP cutouts, safety valves, shut off valves etc. | | |
| Details of Emergency alarm system<br>& push button system in cold chambers | | |
| Emergency lighting in Cold chambers & other areas | | |
| Lightening arrestors | | |
| Any other safety provisions | | |

**Codes & Standards Followed**

| | |
|---|---|
| Building Design & Structure | |
| Construction Materials | |
| Thermal Insulation & Application | |
| Refrigeration Equipment & Systems | |
| Electrical & Mechanical Systems | |
| Food Safety | |
| Others | |

**Energy Saving Equipment & Measures**

| Details of Energy Saving devices | Brief Description and Savings |
|---|---|
| Light Fixtures CFL/LED | |
| Natural Lighting for general areas | |
| VFD for fans / compressors | |

| | |
|---|---|
| Refrigerant Controls and Automation | |
| Air Purger | |
| Power Factor Controller | |
| Energy recovery heat-exchanger for Ventilation System | |
| Renewable/ Solar Energy e.g. PV lighting | |
| PLC Control, & Data Acquisition | |
| Any other features e.g. water recycling, rain water harvesting | |

**Operation & Maintenance**

| Description | Nos. / Details |
|---|---|
| Proposed staff for Operation & Maintenance | |
| Proposed Annual Maintenance Contracts (if any) | |
| Training & Preventive Maintenance procedures | |
| Sanitation & Hygiene practice | |
| Pollution Control | |

**Estimated Performance Parameters of Proposed Cold Store**

| Parameters | Peak Period | Holding Period | Lean Period |
|---|---|---|---|
| Coefficient Of Performance (COP) Of the Cold Store Unit | | | |
| Power Consumption (KWH/Day) | | | |
| Total Electricity Cost (Rs/Day) | | | |
| Electricity Cost towards Storage (Rs/ MT /Day) | | | |

Other Information

**Place** **Signature and**

**Date** **Name of Applicant with seal**

**Format – IV**

**Preliminary (Inspection Report) while submitting project to State MIDH Cell.**

Date of Inspection:

| | | | |
|---|---|---|---|
| A | Component | : | |
| B | **Details of Project**<br>(v) Name of the project<br>(vi) Address for communication with telephone No. | :<br>:<br>: | |
| C | **Project Location with Address**<br>(i). Survey No<br>(ii). Village<br>(iii). Mandal | :<br>:<br>:<br>: | |
| D | Constitution | :<br>:<br>: | Individual/Partnership Firm/ Company. |
| E | (i). Proposed Activity<br>(ii). Type<br>(iii). Proposed type of cooling system | :<br>:<br>: | Cold Storage |
| F | Name of the Promoter | : | |
| G | **<u>Present physical status of the project :</u>**<br>I. Construction started or not<br>(ix) Land development status/boundary/road<br>(x) Connecting road to the plot<br>(xi) Stage of cold store building civil/pre engineered as on inspection date<br>(xii) Type of produce to be stored | :<br>:<br>:<br>: | |

**<u>Certificates:</u>**

This is to certify that the promoter has submitted project proposal along with DPR and all relevant documents for Establishment of Cold storage unit. The project proposal is as per the norms of MIDH and recommended for placing in SLEC for approval.

**Signature of the Promoter** **Signature of the Banker**

**Signature of the HO** **Signature of the DHSO**

**Format – V (A) (CS)**

**JOINT INSPECTION REPORT**
**(Release of First Installment)**

| | | | |
|---|---|---|---|
| A | Component | : | |
| B | **Details of Project**<br>(i) Name of the project<br>(ii) Address for communication with telephone No. | :<br>:<br>: | |
| C | **Project Location with Address**<br>(i). Survey No<br>(ii). Village<br>(iii). Mandal | :<br>:<br>:<br>: | |
| D | Constitution | :<br>: | Individual/Partnership Firm/ Company. |
| E | (i). Proposed Activity<br>(ii). Type<br>(iii). Proposed type of cooling system | :<br>:<br>: | Cold Storage |
| F | Name of the Promoter | : | |
| G | Present physical status of the project : | | |
| H | **Bank Details :**<br>1. Bank Name<br>2. Branch<br>3. Bank Sanction Date<br>4. Loan Account No<br>5. Bank disbursement statement with A/c. No.<br>6. Letter from Banker<br>(Subsidy Account no. given by bank) | :<br>:<br>:<br>:<br>:<br>:<br>: | |

It is recommended to release 1st installment Rs. _____ (Rupees._____ only) as credit linked back ended subsidy in to the subsidy reserve fund account bearing no:---------, IFSC Code:------ Bank:----------, Branch:--------- as the unit has constructed.

**Promotor Banker HO DHSO(Concerned)**

**Format – V (B) (CS)**

## COMPONENT WISE RELEASES MADE BY THE BANKER FOR COLD STORAGE

Name of the Firm :

District :

Place :

Subsidy Account No & IFSC Code:

(Rs. In Lakhs)

| Sl. No. | Particulars | Project Cost | | Actual investment | | Remarks |
|---|---|---|---|---|---|---|
| | | As per project report | As appraised by Banker | Loan amount released by Banker | Promoters Margin money | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1. | Cost on Land | | | | | |
| 2. | Civil Works | | | | | |
| 3. | Cost on Building | | | | | |
| 4. | Cost on Plant & Machinery | | | | | |
| 5. | Ethylene Gas Generation System | | | | | |
| 6. | Plastic Crates | | | | | |
| | **Total:** | | | | | |

Bank Manager /
Representative
(Field Officer)
With Seal

**Format – V (C) (CS)**

## JOINT INSPECTION REPORT FOR COLD STORAGE UNDER POST HARVEST MANAGEMENT COMPONENT OF MIDH, TELANGANA.

**Name of the Firm:**

**District:**

**Place:**

| Sl. No. | Particulars | Project Cost | | Actual investment | | Re marks |
|---|---|---|---|---|---|---|
| | | As per project report | As appraised by Banker | Loan amount released by Banker | Promoters Margin money | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **I.** | **Means of Finance** | | | | | |
| 1. | Capital | | | | | |
| 2. | Term Loan from Bank | | | | | |
| 3. | Subsidy / Margin Money / Un-Secured Loans | | | | | |
| | Total: | | | | | |
| **II.** | **Assessment** | | | | | |
| 1. | Cost on Land | | | | | |
| 2. | Cost on Building | | | | | |
| 3. | Cost on Plant & Machinery | | | | | |
| | Total: | | | | | |

**Certificates:**

1. This is to certify that the promoter has established Cold Storage Unit as per the norms of the MIDH. The promoter has followed all the terms & conditions mentioned in the administrative sanction.
2. This is to certify that the promoter has fulfilled all the observations made in the Techno Economic Viability Report (TEVR). The civil works and installation of machinery/equipment as per technical standards were completed.
3. This is to certify that the project is eligible to avail subsidy of Rs. ----------.
4. An amount of Rs._____ is recommended to release towards 1st installment to the subsidy reserve fund account bearing No: ----------, IFSC Code:……., Bank:----------, Branch:----------.

**Promoter HO DHSO Sr. Officer from Head Office**

**Member from NABCONS Banker TSG/Scientist from DATT Centre**

**Format – V (D) (CS)**

## SUBSIDY CALCULATION SHEET

Name of the **Cold Storage**:

Total No. of Chambers:

Number of Floors:

| Sl.No | Chamber No | Floor | Length (M) | Depth (M) | Height (M) | Internal Volume (CBM) | Conversion (CMB per MT) | MT Capacity of Chamber |
|---|---|---|---|---|---|---|---|---|
| 1 | Chamber - 1 | First | | | | | | |
| | | Second | | | | | | |
| | | Third | | | | | | |
| | | Fourth | | | | | | |
| | Reduce | Internal Stair case | | | | | | |
| | | Lift | | | | | | |
| | **Total Internal Volume of Chamber-1** | | | | | | | |
| 2 | Chamber - 2 | Ground | | | | | | |
| | | First | | | | | | |
| | | Second | | | | | | |
| | | Third | | | | | | |
| | | Fourth | | | | | | |
| | Reduce | Internal Stair case | | | | | | |
| | | Lift | | | | | | |
| | **Total Internal Volume of Chamber-2** | | | | | | | |
| | **Cold Storage Type** | | **CS 1** | **Total Volume (CBM)** | | | **Total Capacity (MT)** | |
| | Limit to MIDH of 5000 MT CS | | | | | | | |
| | Cost per MT Limited to as per MIDH Guideline | | | | 8000 / MT | | | |
| | **Subsidy limited to 35%** | | | | **35%** | | | |

**Certificates:**

1. This is to certify that the promoter has established cold storage unit as per the norms of the MIDH. The promoter has followed all the terms & conditions mentioned in the administrative sanction.

2. This is to certify that the promoter has fulfilled all the observations made in the Techno Economic Viability Report (TEVR). The civil works and installation of machinery/equipment as per technical standards were completed.
3. This is to certify that the project is eligible to avail subsidy of Rs. _____
4. An amount of Rs._____ (Rupees ) is recommended to release towards 1st installment to the subsidy reserve fund account bearing No:_____, IFSC Code:_____, Bank:_____, Branch:_____.

**Promoter HO DHSO Sr. Officer from Head Office**

**Member from NABCONS Banker TSG/Scientist from DATT Centre**

**FORMAT- V - (E) (CS)**

**Detailed Report on Cold Storage at the time of final and Joint Inspection**

Date of Inspection:

| S.No | | Information at the time of Inspection | Remarks |
|---|---|---|---|
| 1. | (i) Name of the project<br>(ii)Address for communication with telephone No.<br><br>(iii) Project location with address<br><br>(iv) Constitution (Individual/ Joint Individual/Partnership Firm/ Company. | | |
| 2. | Proposed Activity<br>Type Proposed type of cooling system | Cold Store | |
| 3. | Name of the Promoter | | |
| 4. | <u>Present physical status of the project</u><br>4A. Date of start<br>(i) Land development status/boundary/road<br>(ii) Connecting road to the plot<br>(iii) Stage of cold store building civil/pre engineered as on inspection date<br>(iv) Installation of power transformer/electricity supply equipment<br>(v) Installation of Refrigeration cooling system<br>(vi) Type of produce<br>(vii) Whether cold storage is functioning.<br>(viii) Size of the Cold Storage<br>(ix) No. of Chambers<br>(x) Size of each Chamber<br>(xi) Chamber-1 in ft<br>(xii) Chamber-2<br>(xiii) Chamberr-3<br>(xiv) Chamber-4<br>(xv) Size of Machinery Room | **Remarks (in detail)**<br>➢<br>➢<br>➢<br>➢<br>➢<br>➢ | |
| 5 | Technical Details | | |
| | Type of Compressor | | |
| | Make /Model No./ Make<br>Serial No. | | |
| | Motor Type<br>Capacity of the Motor in H.P Make | | |
| | Refrigeration Capacity in Kw/TR | | |
| | Total No. of Compressors Installed | | |

| | | | |
|---|---|---|---|
| | Total No. of Motors Installed | | |
| | Total Capacity of Motors in HP | | |
| | Type of Evaporative Coils | | |
| | Total No. of AHU's Installed | | |
| | No. of Fans per Unit | | |
| | Capacity of AHU in Kw/TR | | |
| | Total Capacity of AHU's In TR | | |
| | Type of Condenser | | |
| | Capacity of Condenser in TR | | |
| 6 | 1.Humidifiers : Present / Not present<br>2. Make / Model No.<br>3. Type of Humidifiers | :<br>:<br>: | |
| 7 | Type of Doors | | |
| A | Thickness of Insulation | | |
| B | Insulation Material Used for the Door<br>With Density | | |
| 8 | Generator Make<br>Model No.<br>Capacity in KV | | |
| 9 | Material Handling Lift<br>Capacity | | |
| 10 | Thickness of the Walls | | |
| 11 | Type of Insulation used for walls<br>Wall insulation Thickness/ Density Vapor Barrier used –Details | | |
| 12 | Floor Insulation<br>Type<br>Thickness | | |
| 13 | Ceiling Insulation<br>Material used<br>Thickness<br>Recommendation of Pre Inspecting Officer | | |
| 14 | Capacity of Transformer | | |
| 15 | Fire Safety Devices installed or not | | |
| 16 | Type of Commodities Stored | | |
| 17 | Brief info on the Market Potential | | |
| 18 | Any other Information | | |

**Certificates:**

1. This is to certify that the promoter has established Seed Infrastructure Unit as per the norms of the MIDH. The promoter has followed all the terms & conditions mentioned in the administrative sanction.
2. This is to certify that the promoter has fulfilled all the observations made in the Techno Economic Viability Report (TEVR). The civil works and installation of machinery/equipment as per technical standards were completed.

3. This is to certify that the project is eligible to avail subsidy of Rs. _____
4. An amount of Rs._____ (Rupees ) is recommended to release towards 1st installment to the subsidy reserve fund account bearing No:_____, IFSC Code:_____, Bank:_____, Branch:_____.

**Promoter HO DHSO Sr. Officer from Head Office**

**Member from NABCONS Banker TSG/Scientist from DATT Centre**

**Check list for submission of release proposals towards 1st instalment**

1. Missing documents as per check list (if any)
2. Joint inspection report in format- V (A) CS, V (B) CS, V (C) CS, V (D) CS & V (E) CS.
3. Term loan account statement from lending bank.
4. Letter from lending bank regarding reserve fund account details.
5. Insurance certificate
6. CA certificate (certifying the component wise expenditure)
7. DMC Approval copy.

**FORMAT- V -(F) (CS)**

## JOINT INSPECTION REPORT FOR 2ND INSTALLMENT SUBSIDY

(Project completion and commencement of commercial production of unit)

1. Name of the unit with full address :

2. Date of Administrative sanction :

3. Name of the CEO/Managing Director :

4. Present status of unit/project :
5. Components of project :

| Name of the Component | Size as per DPR | Actual Size |
|---|---|---|
| | | |
| | | |

6. Date of 2nd inspection of JIT members :
7. Name & Designation of JIT member :
   a.
   b.
   c.
   d.
   e.
   f.

8. Means of Finance : (Rs. in lakhs)

| Means of Finance | As per DPR | Actual investment |
|---|---|---|
| Promoter contribution | | |
| Term loan | | |
| Others | | |
| **Total** | | |

9. Date of start of project :
10. Date of completion of civil works and machinery installation:
11. Date of Joint inspection for 1st installment of subsidy :
12. Date of commencement of commercial production of the project :
13. Week wise/Month wise seed processing details :
14. Status of Term loan :
15. Remarks of JIT members :

**Certificate:**

1. This is to certify that the promoter has established Cold Storage unit as per the Norms and MIDH guidelines.
2. This is to certify that the promoter has fulfilled all the terms and conditions laid down in administrative sanction order issued by Horticulture Department.
3. This is to certify that the project has commenced commercial production and running as per projections in DPR/TEVR.
4. The project eligible for total subsidy of Rs._____ Lakhs and Rs. _____ Lakhs is recommended as 2nd installment.

**Promoter Banker HO DHSO**

**TSG (Member) Sr. Officer from Head office Member from NABCONS**

**Check list for submission of release proposals towards 2nd instalment**

1. Missing documents as per check list (if any)
2. Joint inspection report in format-V
3. Term loan account statement from lending bank.
4. Energy audit report.
5. DMC Approval copy.
6. Month wise seed processing details from commercial start of project.

## 4. RIPENING CHAMBERS/ UNITS

**Pattern of Assistance:**

| Sl. No. | Component | Unit cost | Pattern of Assistance |
|---|---|---|---|
| 1 | Ripening chamber | Rs. 1.00 lakh/MT. (max 300 MTs per beneficiary) | Credit linked back-ended subsidy @ 35% of the capital cost of project in general areas and 50% in case of Hilly & Scheduled areas for a maximum of 300 MT per beneficiary. |

### Background Facts

It is also noticed that ripening chambers which are being set up under various schemes of horticulture development, do not posses appropriate technical standards. Main shortcomings noticed are as follows-

- Inadequate building design;
- Use of inadequate / unreliable insulation material with insufficient value
- Use of obsolete and energy inefficient refrigeration units
- Lack of uniform air flow circulation system
- Lack of controlled conditions and technology for ethylene, temperature and relati ve humidity
- Lack of proper ventilation systems and exhaust fans for $Co_2$ emission
- Lack of monitoring and control system and display devices;
- Use of unsafe electrical devices

It is therefore, necessary to prescribe appropriate technical standards in respect of modern, pressurised fruit ripening units which are given in following chapter.

### I. Technical Parameters for Pressurized Ripening Chamber

- Unless specifically otherwise mentioned, all the applicable latest codes and standards published by the Bureau of Indian Standards and all other standards, shall govern in all respects of design, workmanship, quality, properties of materials, method of testing and method of measurements.
- Generally relevant 'IS specification' and 'Code of Practices' shall be used for all electrical, mechanical and civil works/installation, however, wherever IS code is not available, relevant standard codes of ASME /ASH RAE / IIAR or other International Codes are to be followed.
- Latest revisions will be followed in all cases. Even for Ripening of Fruitsand Vegetables' the process as recommended by IS Standards (e.g. IS11977 of 1987 for ripening of green banana) or as per International, Standards should be followed.

- The guidelines and technical specifications of NCCD (National Centre for Cold Chain Development) should be followed

*Storage capacity of ripening chamber may depend on fruits to be ripened & stackin g and air-flow system. In this context, banana may be taken as reference crop for calculati on of storage capacity for a given volume of storage space.* ***11 cubic meter of chamber volume shall be equivalent to 1 metric tonne storage capacity of Ripening chamber****.*

**INDEX for Checklist & Formats for Ripening Chambers**

| Sl. No | Item | Annexure/ Format Number |
|---|---|---|
| 1 | Check List For Projects For Cold Storage & Ripening Chamber | Annexure-I |
| 2 | APPLICATION FORMAT for Cold Storage / Ripening Chamber | Format - I |
| 3 | SYNOPSIS | Format – I (b) (CS/RC) |
| 4 | AFFIDAVIT (Rs. 100/- Stamp Paper ) | Format – II (CS/RC) |
| 5 | Declaration by Engineer | Format – III (CS/RC) |
| 6 | Preliminary (Inspection Report) while submitting project to State MIDH Cell. | Format – IV |
| 7 | Joint Inspection report for Release of First Installment | Format – V (A) (RC) |
| 8 | Format to conduct final and joint inspection by the committee for Ripening Chamber under Post Harvest Management component of MIDH, Telangana | Format – V (B) (RC) |
| 9 | Ripening Chamber | Format – V (C) (RC) |
| 10 | Subsidy Calculation Sheet for Ripening Chamber | Format – V (D) (RC) |
| 11 | Detailed Report on Ripening Chamber at the time of 1st Joint Inspection | Format- V - (E) (RC) |
| 12 | Format for 2nd joint inspection | Format- V - (F) (RC) |
| 13 | Basic Data Sheet | Format – VI |

**Annexure-I**

CHECK LIST FOR PROJECTS FOR COLD STORAGE & RIPENING CHAMBER

| Sl. No. | DESCRIPTION | REMARKS |
|---|---|---|
| 1 | Application Form (Format – I) along with Synopsis in format – I (b) CS/RC | |
| 2 | Basic Data Sheet with Complete Technical Specifications (Format – VI) | |
| 3 | Detailed Project Report as Per MIDH Guidelines | |
| 4 | Partnership Deed | |
| 5 | Firm Registration Certificate | |
| 6 | Bank Sanction Letter | |
| 7 | Bank Appraisal Letter | |
| 8 | Approval from Gram Panchayat | |
| 9 | Approval from Pollution Control Board | |
| 10 | SSI registration certificate | |
| 11 | Fire Department approval with Drawings | |
| 12 | Pan Card Xerox Copy | |
| 13 | Electricity approval | |
| 14 | KYC documents of all the partners | |
| 15 | GST REGISTRATIONS | |
| 16 | Land Conversion | |
| 17 | DMC Approval (District Mission Committee) | |
| 18 | Affidavit (Format – VII) | |
| 19 | Land Documents (Sale Deed / Lease Deed)/ Pattadar pass book copy | |
| 20 | Declaration by Engineer (Format – VIII) | |
| 21 | NOC from NABARD / NHB/ APEDA/ DIC / SFC and MFPI | |
| 22 | CA Certificate | |
| 23 | Original Insurance copy of the Firm | |

**Format - I**

## APPLICATION FORMAT

**Ripening Chamber**

## FORMAT FOR SUBMISSION OF PROJECT BASED PROPOSALS POST HARVEST MANAGEMENT BY PRIVATE SECTOR UNDER MIDH

1. Name of Project :
2. Type of Activity :
3. Objectives :
4. Purpose (Details of crops stored in cold Storages / Ripening Chamber are also to be given) :
5. Location of the project with address :
a) Address for correspondence :
b) General area :
c) Hilly/Tribal area :
6. Constitution :

(Date of incorporation and relevant law along with a copy of articles and memorandum of association, bylaws, partnership deed and registration certificate whichever is applicable. Documentary proof regarding authorized / paid up capital and promoters contribution.)

(a) Public Ltd. Company :
(b) Private Ltd. Company :
(c) Registered Society :
(d) Association :
(e) Federation :
(f) Producer Company :
(g) Proprietorship firm :
(h) Partnership concern :

7. Management :

8. Brief background of promoters :
a) Category / Caste :
b) Bank name & branch and date of sanction:
9. Cost of Project (Rs in lakhs) :
(a) Land- (if purchased new along with documentary proof)
(b) Building :
(c) Plant & Machinery :
(d) Contingencies :
(e) Miscellaneous fixed assets :
(f) Working Capital margin :
(g) Pre operative exp. ----------
Total :
----------

10. Means of Finance

| | | |
|---|---|---|
| (a) Promoter Share | : | |
| (b) Bank Term loan | : | |
| (c) Subsidy | | : |
| (d) Quasi equity | | : |
| (e) Unsecured loan | : | |
| | | --- |
| Total | | : |
| | | --- |

11. Details of Cost of Plant & Machinery/equipment supported by quotations.

12. Details of the Building construction and the cost duly certified.

13. Area of Operation with special reference to MIDH Districts to be covered.

14. Availability of raw material, name of the cluster and District along with the major crops.

15. Backward linkages with farmers with reference to either providing services or purchase of raw material.

16. Forward linkages -Analysis of domestic and export markets, tie up made for sale of Produce and branding aspect.

17. No. of farmers/ orchardist to be benefited.

18. SWOT Analysis.

19. Financial Analysis – IRR, NPW, Cost benefit Ratio, Breakeven point, DER, DSER, Projected balance sheet etc.

20. Insurance of the fixed assets

21. Certificate from Pollution Control Department.

22. Name of the sponsoring bank along with the details of Techno-economical appraisal reports, copy of sanction letter and Detailed Project Report (DPR) as submitted to bank.

23. Affidavit of Rs. 100/- regarding Non-availing of subsidy from any other Central/State Govt.Departments.

24. Social benefits with special reference to employment generation.
    (a) Direct employment
    (b) Indirect employment
    (c) Women/S.T./S.C. employment

25. Details of the sustainability of the project with special reference to its

Capacity to generate income since only one-time grant is admissible.

26. Implementation schedule.

27. Amount of subsidy sought.

28. Production cluster should be identified near the existing infrastructure for pre harvest and post harvest, market and processing, Agri Export Zones (AEZ).

29. Linkages with infrastructure created by the private/ corporate sector in And around the clusters. A write up on the initiatives of the linkages between MIDH clusters and private sector initiative to be brought out.

30. Marketing arrangements for surplus produce inside and outside State/Country to be indicated.

31. List of machinery and equipment.

**Signature of the promoter**

Recommendations of the Director of Horticulture & Sericulture Officer _____.

**DHSO**

**Note: Synopsis to be enclosed in format no. I(b)**

**Format – I (b) (RC)**

**PROPOSALS FOR ESTABLISHMENT OF _____**

**AT _____ DISTRICT _____**

**SYNOPSIS**

**1) Name of the Component & :**

**a) Sub-Component Applied for :**

**2) Title with Firm Details :**

**3) Purpose :**

**4) Name of the Proprietor/ Promoter/ :**

**Partnership/ Pvt. Ltd. Company/**

**Society**

**5) Details of Project Cost:**

a) Bank Term Loan : Rs. Lakhs

b) Other Loan : Rs. Lakhs

c) Capital : Rs. Lakhs

---

**Total Project Cost : Rs. Lakhs**

---

**6) Status of the Project:**

a) Completed/ Under Construction :

b) If Under Construction Stage

Date of Commencement :

Probable date/ month of completion :

**7) Breakup of the Project Cost:**

a) Civil Works : Rs. Lakhs

b) Plant & Machinery & Other : Rs. Lakhs

---

**Total : Rs. Lakhs**

---

**8) List of Documents:**

a) Approval of the DHM (Dist.Collector) :

b) Detailed project report (5copies) :

c) Bank Approval Memorandum :

d) Affidavit :

e) Quotations for Supply of Plant & Machinery :

f) Details of Civil & Technical Works Certified by Chartered Engineer :

g) Photos of unit :

**9) Details of Estimated Cost & Subsidy as Per MIDH Norms:**

a) Estimated cost :Rs. Lakhs /Unit

b) Subsidy :Credit linked back ended subsidy @ 35% of capital cost i.e., Rs. Lakhs/Unit.

Signature of the Promoter

**Format –II (RC)**

**AFFIDAVIT (Rs. 100/- Stamp Paper )**

I / We _____ ( Name of the Promoter / Director ) son of _____ ( Father's Name ) resident of _____ ( residence address ) do hereby solemnly affirm and declare here under.

1) That I am the director of _____,( name of the beneficiary ) having its registered office at _____, ( office address of beneficiary ) and am fully aware of the facts relating to the setting up the project at _____ ( location of the project ) for _____ ( activities to be undertaken by project ) and the application made to MIDH for availing assistance under Developmental Schemes - _____

2) That the terms and conditions of the scheme of MIDH under which an application has been made by the applicant have been properly read and understood by me and I affirm that the project / proposal / scheme comply with the terms and condition of MIDH and the application has been made in the correct applicable scheme.

3) That the proposed activities to be undertaken by the project / proposal / scheme are covered under the above scheme of MIDH and no part of the scheme / infrastructure of the project is designed or assigned to be used for any activity other than the activities specified in the application at present or in the near future.

4) That the information provided in the application for availing assistance under developmental schemes - _____ is true and correct to the best of my knowledge and belief. The estimates of the cost of project / proposal / scheme, financial viability and operating results have been worked out / computed as per the rule and generally accepted principles and norms in this regard.

5) No Subsidy / grant – in – aid has been availed by the promoters / directors / partners / proprietors for this new project and component thereof from central Govt. or any its agencies.

6) I / We also solemnly affirm that the proposed activity in the application for availing assistance under development schemes - _____ is a completely new

activity and not a pre – existing activity or any component thereof and further I assure that the unit will be utilized for the same activity for which the assistance is sought from the MIDH through State MIDH Cell of Telangana Govt for the economic period of 15 years. In case, if the unit is misused I am liable for any action deemed to be fit by the Govt. of Telangana including recovery of the assistance amount extended. The information furnished in the application dated _____ is true to the best of my knowledge and belief and nothing material has been concealed.

7) In case of concealment of any facts in this regard, the MIDH would have right to cancel my application out right at any stage.

8) I will display a sign board depicting “Department of Horticulture“ (MIDH, Assisted Project).

9) The release of subsidy is subject to actual expenditure, receipts, inspection, MIDH norms etc., In case of any discrepancy / dispute the decision of the Mission Director & Director of Horticulture is final.

10) I agree and resolve that the department reserves the right to modify, add or delete any term/ condition without assigning any reason thereof and shall also have right to pre and post inspect / monitor the project and verify the related records at any time during the economic life of the project by the concerned officers.

**DEPONENT VERIFICATION**

Verified on solemn affirmation at _____ that the content of the above affidavit are true to the best of my knowledge and belief and nothing material has been concealed.

**DEPONENT / COMPETENT AUTHORITY**

**( to be Signed by Notary with seal )**

**Format – III(RC)**

## DECLARATION BY ENGINNER

**I _____, R/o. _____- certify that:**

1. That I am a graduate engineer and have adequate experience / expertise in designing, Constructing and commissioning cold stores, insulation & cooling system and cold chain infrastructure equipment.
2. That a copy of my graduation / post graduation certificate of B.E. / B. Tech / M. Tech is enclosed and shall form part of my certification and declaration.
3. That I am the project / Technical Consultant and have been hired by the project promoter of M/s. _____ to design, conceptualize and prepare the project DPR bearing Ref. No.___.
4. That I am fully conversant with relevant codes and standards applicable to the cold chain infrastructure and affirm invariable compliance of the project to the above mentioned prescribed Technical Standards.
5. That I have thoroughly examined notification F. No. 45-64/2010-Hort dated 25.02.2010 for prescribed technical standards w.e.f. 01.04.2010.

6. That I certify that the components of insulation and refrigeration systems in the prescribed format of the technical data sheet conform the ratings and performance of selected equipments and proposed design as per the prescribed Technical Standards w.e.f. 01/04/2010 vide notifications F. No. 45-64/2010-Hort dated 25.02.2010.
7. That I undertake to DHSO to the requirements of confidentiality and non-compete with respect to proprietary information entrusted to me by the promoter/manufacturer of equipment / the Board.
8. That I will assist the Government inspection and regulatory agency during stage inspection of the project and provide any/or all technical clarifications as and when required.
9. That I will furnish a certificate of satisfactory commissioning of the cooling system in conformance to the performance indicators as per the prescribed standards.
10. That in case of any concealment of facts by me in the DPR with respect to invariable compliance to Technical Standards or on any instance of false declaration / certification by me or any part of my declaration is found to be

incorrect, the Board may, in its discretion, take any actions (including legal action) against me as deemed fit and proper.

**IN WITNESS WHEREOF,** the consultant has signed this declaration and certification on this ___ Day of _____ 2018 in the presence of the following witnesses;

**WITNESSES:**

**1.**

**(Sign of the Consultant)**

**With Seal**

## BASIC DATA SHEET

**Format – VI**

A. Identification

| | | | |
|---|---|---|---|
| Name of Cold Storage | | | |
| Location of Cold Storage | Area / Village | Town | |
| | District | State | |
| Name of Promoter Company / Owner | | | |
| Type of company (Proprietorship / Partnership / Pvt. Ltd / Ltd) | | | |
| Postal address of Promoter | | | |
| | Tel / Fax | Mob. No | E-mail |
| Present activity in brief | | | |
| Name of CEO / MD | | | |
| Name of Manager / Contact Person | | Phone / Mobile No | |

B. Basic Cold Store Design Considerations

i) Commodity Storage Requirements

| | | |
|---|---|---|
| Type of Commodities/Produce | | |
| Ideal / Recommended Storage Conditions<br>– Temperature (DB in $^{O}$C)<br>– Humidity RH (%) Range<br>– Air Circulation (CMH/MT of Produce)<br>– Ventilation (Air Changes/Day)<br>– $CO_2$ Range (PPM)<br>Produce Cooling Rate ( $^{O}$C/day)<br>Freezing Point $^{O}$C<br>– Others | | |
| Cold Chamber Dry bulb (DB in $^{O}$C) | | |
| Cold Chamber RH (%) | | |
| Max Storage period (months) | | |
| Max product temp ($^{O}$C)<br>– at the time of loading | | |
| Daily loading rate (MT/day)<br>– in each cold chamber | | |
| Loading Period (months) | | |
| Pull down rate ($^{O}$C / day) | | |
| Unloading Period (months) | | |
| Daily unloading rate (MT/day)<br>– from each cold chamber | | |
| Ante Room Conditions (T $^{O}$C & RH %) | | |
| Sorting & Grading Area (T $^{O}$C & RH %) | | |
| Special Provisions<br>CIPC treatment for Process Potatoes | | |
| Special Provisions – MA / Ethylene Control / Fumigation/ Fresh Air etc | | |

**ii) Fresh Air / Ventilation System**

| | |
|---|---|
| Brief Description of $CO_2$ Extraction / Ventilation System | |
| $CO_2$ Concentration Control Range (PPM) | |
| Monitoring & Control Instrument<br>– Type<br>– Accuracy | |
| Ventilation Capacity (Max Air Changes/Day) | |
| Design Considerations for Energy Recovery and Preventing Wetting of Produce | |

**iii) Cold Store Chamber Sizing and Capacity**

No. of chambers:

Type : Mezzanine/ Palletized

Max Height of Building

| Details | CSC 1 | CSC 2 | CSC 3 | CSC 4 |
|---|---|---|---|---|
| Total Capacity of Each Cold Store Chamber ( MT) | | | | |
| Internal Chamber Dimensions<br>L x B x H (m) | | | | |
| No. of mezzanine floors<br>X Height (m) per floor | | | | |
| Size &Weight of Bags or Boxes being stored | | | | |
| Total number of Bags/Boxes stored in each Cold Store Chamber | | | | |

**iv) Ante Room & Process Areas**

| Details | Length (m) | Width (m) | Height (m) |
|---|---|---|---|
| Ante Room | | | |
| Sorting & Grading Area | | | |
| Loading / Unloading dock | | | |

**v) Machine Room & Utility Areas**

| Details | Length (m) | Width (m) | Height (m) |
|---|---|---|---|
| Machine Room | | | |
| Office Area | | | |

| | | | |
|---|---|---|---|
| Toilets & Changing rooms | | | |
| Any other | | | |

**vi) Building & Construction Details**

Type of construction: Civil/ Pre-engineered Building

| | |
|---|---|
| Type of External walls of cold chambers | |
| Type of Internal / Partition walls | |
| Type of Roof / Ceiling | |
| Type of Internal structure / Racks | |
| Type of mezzanine grating | |
| Types of Lighting fixtures in cold Chambers | |
| Types of Lighting fixtures in Process & Other Areas | |

**ii) Insulation and Vapor Barrier**

Type of Insulation: Insulating Sheets / Metal Skin Composite panels

| **Type of Insulation** | **Wall** | | **Ceiling / Roof** | **Floor** |
|---|---|---|---|---|
| | **External** | **Internal** | | |
| Type of material<br>EPS / Metal Skin PUF Composite Panels / XPS/ PUR, Others | | | | |
| Relevant IS Code | | | | |
| Density ($kg/m^3$) | | | | |
| Thermal Conductivity at +10°C<br>k value ( W/m.K) | | | | |
| Thermal diffusivity m2/h | | | | |
| Water vapour transmission rate, ng/Pa.sm, Max. | | | | |
| Water absorption after 24h immersion, percentage by mass. | | | | |
| Relevant IS Code of Practice for Thermal Insulation of Cold Store | | | | |
| Total Insulation Thickness (mm) | | | | |
| No. of layers &<br>Thickness / layer (mm) | | | | |
| Type of vapor barrier & thickness (microns) | | | | |
| Type of Bituminous/Sticking Compound | | | | |

| | | | | |
|---|---|---|---|---|
| Type of Cladding / Covering/External Finish | | | | |
| Locking/Fixing & Sealing System in case of Metal Skin Composite Panels | | | | |
| Any other info | | | | |

**viii) Cold Store Doors & Air Curtains**

| Type of Insulation | Details |
|---|---|
| No. of Insulated doors | |
| Type hinged / sliding | |
| Insulation Material EPS / PUF / Others | |
| Thickness of Insulation (mm) | |
| Type of cladding | |
| Size of door opening | |
| Provision of Strip curtains – nos. & overlap % | |
| Air curtains, if any | |
| Others | |

**ix) Material Handling**

Proposed Practice: Manual / Semi Automated /Automated

| Procedure | Brief Description |
|---|---|
| Material Handling Procedures & Equipments | |
| Cap of Electric Elevator<br>Rating of motor (kW) | |
| Any other device | |

**x) Grading, Sorting Washing & Packing Line (optional)**

Proposed Practice: Manual / Semi Automated /Automated

| Procedure | Brief Description |
|---|---|
| Process Line | |
| Total Connected Load (kW) | |

Please attach a Plan & Layout of the proposed Cold Store unit in accordance to the Statutory Building By-Laws and BIS Building Codes & Standards duly approved by a

Registered Architect and Structural Engineer. The drawings should detail out insulation type, thickness and fixing methodology in sectional details.

**C. Heat Load Calculation of Cooling System – Summary**

| Ambient Conditions | Summer | Monsoon | Winter |
|---|---|---|---|
| Dry Bulb Temperature (°C) | | | |
| Wet Bulb Temperature (°C) | | | |

| Refrigeration Load | | During Loading (kW) | During Pull Down (kW) | During Holding (kW) |
|---|---|---|---|---|
| Transmission Load | | | | |
| Product Load | | | | |
| Internal Load | Lighting load | | | |
| | Occupancy load | | | |
| Infiltration Load | | | | |
| Ventilation/ Fresh Air Load | | | | |
| Equipment Load - Fan motors etc. | | | | |
| Total Load (kW/24 hrs) | | | | |

| | | | |
|---|---|---|---|
| Compressor Operation Hours/Day | Loading Period | | |
| | Pull Down Period | | |
| | Holding period | | |
| Multipliers | Safety Factor | | |
| | Defrost Period | | |
| Total Refrigeration Load | Peak Period | Holding Period | Lean Period |
| Total Load (KW) | | | |

Please attach detailed heat load calculation sheets of the proposed cold store unit in accordance to the prescribed Technical Standards and Guidelines duly approved by a Qualified Engineer.

## Cooling System Design & Equipment Selection

Cooling System Configuration

| | |
|---|---|
| Type of Refrigerant | Ammonia /Freon /Others |
| Type of System | Direct Exp / Gravity Feed / Overfeed |
| Type of compressor | Reciprocating / Screw / Scroll / Others |
| Type of capacity control | Automatic In steps / Step less |
| Type of condenser | Atmospheric / Evaporative / Shell & Tube / Plate Heat Exchanger / Other |
| Cooling Towers ( if applicable) | FRP Induced Draft / Others |
| Type of cooling coil | Ceiling suspended / Floor Mounted / Others |
| Type of defrosting | Air / Water / Electric / Hot gas |
| Humidification System & Control ( Brief Description) | |

**Compressor Detail**

| Compressor Make & Model | Nos. | Comp. RPM | Operating Parameters Evap. SST. / Cond. Temp ($^{O}$C) | Refrigeration Capacity (KW) | Motor Rating. (KW) | Total Electric Power. (BkW) | Remarks Working /Standby |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |

**Condenser Details**

| Condenser Make & Model | Nos. | Operating Parameters Cond.Temp.(SDT)/ in/out water temp($^{O}$C) &flow (lps) | Condenser Capacity (kW) | Electric Fan /Pump Motor Rating (kW) | Total Electric Power (BkW) | Remarks Working /Standby |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |

**Cooling Tower Details ( if applicable)**

| Cooling Tower Make & Model | Nos. | Operating Parameters DB & WB Temp, in/out water temp($^{O}$C) | Cooling Tower Capacity(KW) | Fan & Pump Capacity (CMH/LPS) & Motor (kW) | Total Electric Power (BkW) | Remarks Working /Standby |
|---|---|---|---|---|---|---|

**Air Cooling Units (ACU)**

| ACU Make & Model | Nos. | Operating Parameters Evap. (SST) & TD* ($^{O}$C) | Cooling Capacity (kW) | Air Flow (CMH) & Face Velocity (M/S) | Material of Coil Tubes & Fins | Fin pitch (mm) | Total Fan Electric Power (BKW) |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

(*) TD – Temperature difference between Evap. (SST) $^{O}$C & Return Air (at coil inlet).

Please attach Detailed Technical Data Sheets of each equipment namely Compressors, Condensers, Cooling Towers, Air Cooling Units giving General Layout, Dimensions, Material of Construction, Rated Capacity, Operating Parameters and COP (please note that the Air Cooling Unit data sheet should include heat transfer area, fin spacing, no. of rows, air flow, face velocity, fan static, air throw, Fan Motor BKW/KW, fin spacing, etc ) duly Certified by the respective equipment manufacturers with reference to the Relevant Codes & Standards. Electrical Instillation

| | |
|---|---|
| Total Connected load (kW) | |
| Estimated power requirement at Peak Load Period (BkW) | |
| Estimated power requirement at Holding Load Period (BkW) | |
| Estimated power requirement at Lean Load Period (BkW) | |
| Capacity of Transformer (KVA) (proposed) | |
| Size of Capacitor for power factor correction & their operation | |
| Make & Capacity of standby D.G.Set (KVA) | |

**Safety Provisions**

| | | |
|---|---|---|
| Details of Fire Fighting equipment | Dry | |
| | Water based | |
| Handling Refrigerants & Leaks | Leak Detection | |
| | Handling measures | |
| Safety devices – LP/HP cutouts, safety valves, shut off valves etc. | | |
| Details of Emergency alarm system & push button system in cold chambers | | |
| Emergency lighting in Cold chambers & other areas | | |
| Lightening arrestors | | |
| Any other safety provisions | | |

**Codes & Standards Followed**

| | |
|---|---|
| Building Design & Structure | |
| Construction Materials | |
| Thermal Insulation & Application | |
| Refrigeration Equipment & Systems | |
| Electrical & Mechanical Systems | |
| Food Safety | |
| Others | |

**Energy Saving Equipment & Measures**

| Details of Energy Saving devices | Brief Description and Savings |
|---|---|
| Light Fixtures CFL/LED | |
| Natural Lighting for general areas | |
| VFD for fans / compressors | |
| Refrigerant Controls and Automation | |
| Air Purger | |
| Power Factor Controller | |
| Energy recovery heat-exchanger for Ventilation System | |
| Renewable/ Solar Energy e.g.<br>PV lighting | |
| PLC Control, & Data Acquisition | |
| Any other features e.g. water recycling, rain water harvesting | |

**Operation & Maintenance**

| Description | Nos. / Details |
|---|---|
| Proposed staff for Operation & Maintenance | |
| Proposed Annual Maintenance Contracts (if any) | |
| Training & Preventive Maintenance procedures | |
| Sanitation & Hygiene practice | |
| Pollution Control | |

**Estimated Performance Parameters of Proposed Cold Store**

| Parameters | Peak Period | Holding Period | Lean Period |
|---|---|---|---|
| Coefficient of Performance (COP)<br>Of the Cold Store Unit | | | |
| Power Consumption (KWH/Day) | | | |

| | | | |
|---|---|---|---|
| Total Electricity Cost (Rs/Day) | | | |
| Electricity Cost towards Storage (Rs/ MT /Day) | | | |

Other Information

**Place** **Signature and**

**Date** **Name of Applicant with seal**

**Format –IV (A) (RC)**

**RIPENING CHAMBERS**
**Preliminary Inspection Report**
**(At the time of submission of project to State MIDH Cell)**

Date of Inspection:

| | | | |
|---|---|---|---|
| A | Component | : | |
| B | **Details of Project**<br>(i) Name of the project<br>(ii) Address for communication with telephone No. | :<br>:<br>: | |
| C | **Project Location with Address**<br>(i). Survey No<br>(ii). Village<br>(iii). Mandal | :<br>:<br>:<br>: | |
| D | Constitution | : | Individual/Partnership Firm/Company |
| E | (i). Proposed Activity<br>(ii). No of Chambers | :<br>: | Ripening Chamber |
| F | Name of the Promoter | : | |
| G | **<u>Present physical status of the project :</u>**<br>I. Construction started or not<br>(i) Land development status/boundary/road<br>(ii) Connecting road to the plot<br>(iii) Stage of Ripening Chamber building civil/pre engineered as on inspection date<br>(iv) Type of produce to be Ripened | :<br>:<br>: | |

**<u>Certificates:</u>**

This is to certify that the promoter has submitted project proposal along with DPR and all relevant documents for Establishment of Cold storage unit. The project proposal is as per the norms of MIDH and recommended for placing in SLEC for approval.

**Promoter** **HO** **DHSO**

**Format – IV (B) (RC)**

## Joint Inspection Report - Release of First Installment

| | | | |
|---|---|---|---|
| A | Component | : | |
| B | **Details of Project**<br>(i) Name of the project<br>(ii) Address for communication with telephone No. | :<br>:<br>: | |
| C | **Project Location with Address**<br>(i). Survey No<br>(ii). Village<br>(iii). Mandal | :<br>:<br>:<br>: | |
| D | Constitution | :<br>: | Individual/Partnership Firm/ Company |
| E | (i). Proposed Activity<br>(ii). Type<br>(iii). Proposed type of cooling System | :<br>:<br>: | Ripening Chamber |
| F | Name of the Promoter | : | |
| G | Present physical status of the project : | | |
| H | **Bank Details :**<br>1. Bank Name<br>2. Branch<br>3. Bank Sanction Date<br>4. Loan Account No<br>5. Bank disbursement statement with A/c. No.<br>6. Letter from Banker<br>(Subsidy Account no. given by bank) | :<br>:<br>:<br>:<br>:<br>: | |

It is recommended to release 1st installment Rs. _____ (Rupees._____ only) as credit linked back ended subsidy as the construction of the unit was started.

**Promoter** **Banker** **HO** **DHSO**

## FORMAT TO CONDUCT FINAL AND JOINT INSPECTION BY THE COMMITTEE UNDER POST HARVEST MANAGEMENT COMPONENT OF MIDH, TELANGANA

**RIPENING CHAMBER** **Format – V (B) RC**

Name of the Firm: District:

Place:

| Sl. No. | Particulars | Project Cost | | Actual investment | | Remarks |
|---|---|---|---|---|---|---|
| | | As per project report | As appraised by Banker | Loan amount released by Banker | Promoters Margin money | |
| **1** | **2** | **3** | **4** | **5** | **6** | **7** |
| I. | Means of Finance | | | | | |
| 1. | Capital | | | | | |
| 2. | Term Loan from Bank | | | | | |
| 3. | Subsidy / Margin Money / Un-Secured Loans | | | | | |
| | **Total:** | | | | | |
| II. | Assessment | | | | | |
| 1. | Cost on Land | | | | | |
| 2. | Cost on Building | | | | | |
| 3. | Cost on Plant & Machinery | | | | | |
| | **Total:** | | | | | |

Recommended for release of subsidy of Rs. _____ Lakhs (Rupees in words)

**Certificates:**

1. This is to certify that the promoter has established Seed Infrastructure Unit as per the norms of the MIDH. The promoter has followed all the terms & conditions mentioned in the administrative sanction.
2. This is to certify that the promoter has fulfilled all the observations made in the Techno Economic Viability Report (TEVR). The civil works and installation of machinery/equipment as per technical standards were completed.
3. This is to certify that the project is eligible to avail subsidy of Rs. ----------
4. An amount of Rs._____ is recommended to release towards 1st installment to the subsidy reserve fund account bearing No: ----------, IFSC Code:……..., Bank:----------, Branch:----------.

**Promoter HO DHSO Sr. Officer from Head Office**
**Member from NABCONS Banker TSG/Scientist from DAATTC**

**RIPENING CHAMBERS** **Format – V (C) - RC**

**Name of the Firm:**

| Sl. No. | Component of cost | Quantum | Unit |
|---|---|---|---|
| 1. | Land | | Sft |
| 2. | Building | | Sft |
| 3. A | No of Chambers | | |
| 3. B | Chamber Size | | |
| | a. Length | | Ft |
| | b. Width | | Ft |
| | c. Height | | Ft |
| | d. Crates that can be accommodated of size 1.77'x1.28x1.08' (540x390x340 mm) at 10 crates longitudinally, 3 rows on either side of isle and 8 columns i.e. (10x3x8)*2 No's | | No |
| 4. | Fruit storage | | |
| | a. Per Crate | | Kgs |
| | b. Total for chamber | | Kgs |
| 5. | Insulation | | |
| | a. PUF panels side and top and polysterene for floor | | Sft |
| | b. Polysterene panels | | Sft |
| | c. Thermocole/ Glass wool etc. | | Sft |
| 6. | Door | | |
| | a. Hinged Doors | | |
| | b. Sliding Doors | | |
| | c. Electric operated top sliding door | | |
| 7. | Refrigeration | | |
| | a. Direct cooling – Freon systems – 5 HP | | Nos |
| | b. Direct cooling – Ammonia systems | | Nos |
| | c. Water spray – Air Cooled systems | | Nos |
| 8. | Humidification | | |

| Sl. No. | Component of cost | Quantum | Unit |
|---|---|---|---|
| | a. Humidifier | | Nos |
| | b. Air cooled systems | | |
| 9. | Controls | | |
| | a. Temperature and humidity | | Nos |
| | b. Control panel for refrigeration system | | Nos |
| 10. | Ethylene Gassing System | | |
| | a. Ethylene liquid dipping | | Nos |
| | b. Ethylene gas generator | | Nos |
| | c. Ethylene gas injection system | | Nos |
| 11. | Crates | | Nos |
| 12. | Pallets | | Nos |
| 13. | Trolley | | Nos |
| 14. | Deposits for Electricity etc. | | Set |
| 15. | Pre-Operative Expenses | | Set |
| 16. | Working Capital | | Set |

**Promoter HO DHSO Sr. Officer from Head Office**

**Member from NABCONS Banker TSG/Scientist from DAATTC**

**SUBSIDY CALCULATION SHEET FOR RIPENING CHAMBER** **Format – V (D) - RC**

Name of the Ripening Chamber :
Total No. of Chambers:

| **Chamber – I** | | | | | | **Chamber - II** | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Particulars | Length | Width | Height | Volume in Cubic feet | | Particulars | Length | Width | Height | Volume in Cubic feet | |
| **A) Ground Floor** | | | | | | **B) Ground Floor** | | | | | |
| | | | | | | | | | | | |
| **Chamber – III** | | | | | | **Chamber - IV** | | | | | |
| **C) Ground Floor** | | | | | | **D) Ground Floor** | | | | | |
| | | | | | | | | | | | |
| **E) Less :** | | | | | | | | | | | |
| a) Machine Space : | | | | | | | | | | | |
| b) Office Space : | | | | | | | | | | | |
| | | | | | | | | | | | |
| **Total Net Volume (A+B+C+D)-E** | | | | | | | | | | | |
| | | | | | | | | | | | |
| **F. Total Volume** | | | | | | | | | | | |
| Chamber - I | | | | | | | | | | | |
| Chamber - II | | | | | | | | | | | |
| Chamber - III | | | | | | | | | | | |
| Chamber - IV | | | | | | | | | | | |
| Total Cost of the Project in Rs. : | | | | | | | | | | | |
| Eligibility Subsidy in Rs. : | | | | | | | | | | | |

**Promoter** **HO** **DHSO** **Sr. Officer from Head Office**

**Member from NABCONS** **Banker** **TSG/Scientist from DAATTC**

**Format –V (E) -RC**

**Detailed Report on Ripening Chamber at the time of final and Joint Inspection**

- Name of the firm :
  Proprietor / Partnership :
  Name & Address :

  Phone Nos. :
- Land (own/lease) purchased / inherited:
  If purchased for this purpose, sale deed: } If only the land cost included in the
  Title deed : project cost
  Area (sq.mt) :
  Cost of land :
- Shed (own/lease) :
  Dimensions of the structure : } If any the shed cost is included

  If shed constructed: Plan, Valuation by Engineer : in the project cost.

  Leased period, Lease deed (registered or not) :
- Refrigeration unit :
  Company :
  Code :
  Capacity :
- Commodity used :
  No of chambers :

  Internal dimension of the chambers (l,b,h,in ft.) :

  Thickness of Puf panel :

  No. of Puf panels :

Size of each panel :

Density of Puf :

- Floor insulation details (dimensions):
- Compressor : _____ HP
- Condenser motor : _____ HP, _____ RPM, _____ Nos
- Evaporator fan motor : _____ W, _____ RPM, _____ Nos

  Power supply : _____ V, _____ PH, _____ HZ

  Total power consumption : _____ Kw.

  Power consumption / batch

  (4 or 5 days) : _____ Kwh

  Power costs / kwh. :

  No of batches / year :

  Wt of bananas per batch :

  Cost of procurement of banana per ton :

  Sale price of banana per ton :

- Humidifier cost & Make (Indian or Foreign) & nos.:

- Ethylene generator : cost , Nos:

- Bills (certified)

  Refrigeration unit :

  Puf Panels :

  Control devices (temp, RH etc.) :

Humidifier :

Ethylene generator :

- No. of crates / chamber :

  Dimensions of the crates (ft) :

  Weight of bananas per crate :

- Any other (pl. specify) :

a) Copies of bills / vouchers / invoices / receipts – counter signed by banker.
b) Bank sanction letter with appraisal report.
c) Loan disbursement details./ Statement of account ,(Acct.No)

**Promoter HO DHSO Sr. Officer from Head Office**

**Member from NABCONS Banker TSG/Scientist from DAATTC**

## 5. LOW-COST ONION STORAGE STRUCTURES

REQUIREMENTS

For effective long storage of onion, the parameters essential to be looked after are the bulb size, choice of cultivars, cultivation practices, time of harvest, field curing, removal of tops, drying, grading, packing, storage conditions (optimum storage range of relative humidity 65% to 70% with the temperature ranging between 25°C to 30°C).

Salient Features of Improved Storage Structures are:

1. Construction of structure on a raised platform to prevent moisture and dampness due to direct contact of bulbs with the soil.
2. Use of Mangalore tile type roof or other suitable materials to prevent built up of high inside temperature.
3. Increased centre height and more slope for better air circulation and preventing humid micro climate inside godown.
4. Providing bottom and side ventilations for free and faster air circulation and to avoid formation of hot and humid pockets between the onion layers.
5. Avoid direct sunlight or rain water falling on onion bulbs to reduce sun scald, fading of colour and quality deterioration.
6. Maintenance of stacking height to avoid pressure bruising.
7. Periodical disinfection of structures and premises to check rottage.
8. Cost effectiveness of structures is based on utilization of locally available material for the construction.

**PATTERN OF ASSISTANCE :**

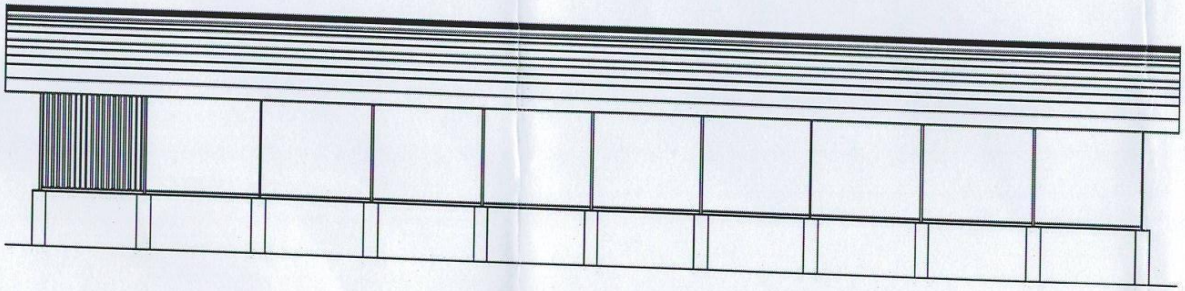
- Unit cost for 25 MT capacity of Low-Cost Onion Storage Structure: Rs.1.75 lakh per unit (Unit cost Rs. 7000/- per MT & Subsidy is Rs. 3500/- per MT)
- Subsidy @ 50% of the admissible total cost.
- Prorata basis can be adopted for smaller sizes than 25MT.

**TECHNO-FINANCIAL PARAMETERS AFDOPTED FOR WORKINGOUT THE ECONOMICS OF A 25MT ONION STORAGESTRUCTURE**

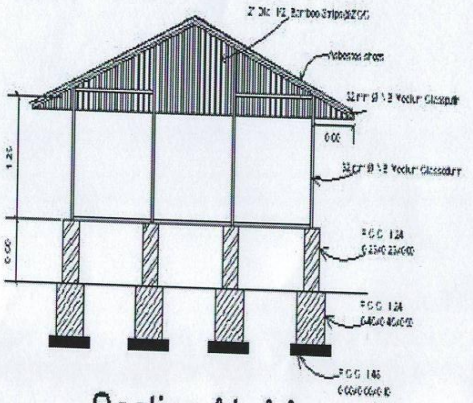
| | | |
|---|---|---|
| 1 | Land requirement | 6.5 m X 7.0 m |
| 2 | Storage space requirement | 4.5 m X 6.0 m |
| 3 | Technology preferred | Natural or forced ventilation maintaining a Temperature between 25and30oCwitha relativehumidityrangeof65to70%. |
| 4 | Clearance of storage platform from the ground | 60 cm |
| 5 | Height of the storage platform | 90 to 150 cm |

ESTIMATE FOR ONION STORAGE CAPACITY OF 25 MT.

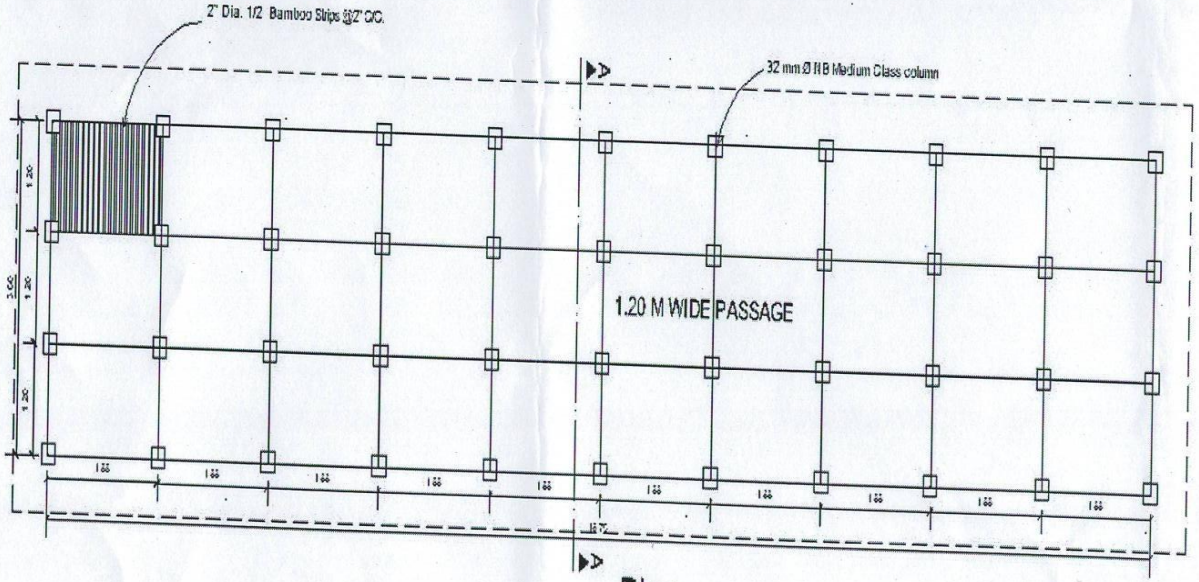
| Sl. No. | Description | Unit | Total | Rate | Amount (Rs.) |
|---|---|---|---|---|---|
| 1 | Excavation for foundation | Cum | 3.888 | 132 | 513.26 |
| 2 | P.C.C. 1:4:8 in foundation | Cum | 0.729 | 3000 | 2187.00 |
| 3 | R.C.C. 1:2:4 for columns | Cum | 2.339 | 3840 | 8981.76 |
| 4 | Nominal Reinforcement to columns | Kg | 320 | 62.40 | 19968.00 |
| 5 | Structural Steel Works | Kg | 1200 | 72 | 86400.00 |
| 6 | A/C Sheet Roofing | Sq.mtr. | 83.2 | 240 | 19968.00 |
| 7 | A/C Sheet Ridge | Rmt | 13 | 144 | 1872.00 |
| 8 | 2” dia 4/2 bamboo strips @ 3” c/c | Rmt. | 1454.4 | 30 | 43632.00 |
| | | **TOTAL** | | | **183522.02** |
| | | | | **Rounded to Rs.** | **1,75,000.00** |



Side Elevation



Section At -AA




Plan

Plan For Proposed Onion Storage Shed Of 25 M.T.
(Double Row Plan)

| | |
|---|---|
| DRW. : Dhananjay Pawar | Date : 18/08/07 |
| Architect<br>Dhananjay M. Shinde<br>Ph. No.- 0253-2571201,2316706 | Structural Engineer<br>Pramod Kulkarni<br>Ph. No.- |

**N.H..R.D.F.. Nashik.**

**Capacity wise Dimensions of onion storage structures :**

| S.No | Dimensions | 5MT | 10MT | 15MT | 20MT | 25MT |
|---|---|---|---|---|---|---|
| 1 | Length (Mt) | 4.5 | 7.5 | 7.25 | 9.6 | 12 |
| 2 | Width (Mt) | 1.5 | 1.5 | 1.2 | 1.2 | 1.2 |
| 3 | Side height (Mt) | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 4 | Central height (Mt) | 3.3 | 3.3 | 3.4 | 3.4 | 3.4 |
| 5 | Height of roof (Mt) | 3.6 | 3.6 | 6 | 6 | 6 |
| 6 | Height from land (Mt) | 0.6 | 0.6 | 0.6 | 0.6 | 0.6 |
| 7 | Direction of construction | S-N | S-N | E-W | E-W | E-W |

**The following parameters shall be followed for construction of onion storage Structures for reducing the storage losses.**

- Suitability of site with proper elevation, drainage and linkages by road.
- Adequate bottom and side natural ventilation facilities shall be provided.
- No tall structures shall be located nearer to the onion sheds.
- For natural ventilation, storage width shall be restricted to 610 cm.
- In the areas having high humidity, the storage width may be reduced/
- necessary mechanical ventilation provision.
- Onion storage structures shall be oriented to face wind ward direction.
- Leeward side wall opening below the platform shall be closed.
- During storm/ heavy rains, provision shall be made to close the windward side and wherever necessary to open the leeward side.
- Adequate overhang shall be provided to prevent splashing of rain water or sunlight falling on the onion.
- The roof of material shall prevent heat built – up at the top of the sheets structure.

**Different sizes of Onion storage structures:**

| S.No. | Capacity (MT) | Unit Cost (Rs) | Remarks | Coverage |
|---|---|---|---|---|
| 1 | 5 | 35,000 | Single tier structure having 3.75 mt length and 1.5 mt width 2 cubicals of 1.88 X 1.5X1.5 mt size | For small and marginal famers cultivating onion **less than 1-acre area**. |
| 2 | 10 | 70,000 | Single tier structure having 7.5 mt length and 1.5 mt width 4 cubicals of 1.88 X 1.5X1.5 mt size. | Famers cultivating onion **about 1-acre area.** |
| 3 | 15 | 105,000 | Single row structure having 11.25 mt length and 1.5 mt width,with 6 cubicals of 1.88 X 1.5X1.5 mt | Famers cultivating onion on **about 2 acres area** |
| 4 | 25 | 175,000 | Two row structures, cubilcals arranged in 2 rows with 1.2 mt wide passage between 2 rows | Famers cultivating onion on **about 1 ha area** |

**General Guidelines:**

i. The DHSO/HOs shall identify suitable beneficiary as per the available target and collect application with necessary documents, affidavit etc.
ii. The administrate sanction shall be accorded to the beneficiary with the approval of the DMC.
iii. The DHSO/HO shall guide the farmers with regard to the prescribed dimensions & specifications for the Onion storage structures for commencement of construction by the farmer.
iv. The HO shall take completion certificate from the beneficiary and inform the same to O/o DHSO of concerned district.
v. A joint inspection team with HO concerned, MI- Engineer & DHSO shall be constituted and inspect the Onion storage structure in the presence of promoter/ beneficiary.
vi. The Join inspection team shall verify the structure physically, bills/ invoices and recommend for sanction of eligible subsidy in the prescribed JIT report format.
vii. SURAKSHA filing of beneficiary details is mandatory.
viii. The DHSO shall submit release proposals along with the joint inspection reports, photographs and DMC approval to the Director of Horticulture. The same proposals shall also be forwarded to DoH login of Suraksha portal(After on Boarding).
ix. Subsidy shall be released to the beneficiary from head office subject to availability of funds.

FORMAT TO CONDUCT FINAL AND JOINT INSPECTION OF **ONION STORAGE STRUCTURE** BY THE COMMITTEE UNDER POST HARVEST MANAGEMENT COMPONENT OF MIDH, TG.

**Name: .....** **Place:..... District:.....**

| **As per project report** | | | | **As per the inspection and actual investment** | | | | |
|---|---|---|---|---|---|---|---|---|
| Item | Specifications /Details | Qty | Total Cost (Rs) | Item | Specifications /Details | Qty | Total Cost (Rs) | Remarks |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

**Certificates:**

1) This is to certify that Sri. /Smt. _____ has established Onion Storage structure as per project report and norms of MIDH.

2) This is to certify that all the original purchase bills of the items mentioned above have been verified and found correct.

3) This is to certify that Sri./Smt. _____ is eligible to avail subsidy of Rs. _____ and the same may be released.

Promoter MIE Horticulture Officer DHSO

## 6. Technology induction in Cold chain, Add on for CA & Modernization – Alternate technology - Solar PV panels/ Solar thermal sys

**Pattern of assistance:**

| Sub component | Item | Admissible cost | Pattern of assistance |
|---|---|---|---|
| Technology induction and modernization of cold-chain | Alternate technologies, Solar PV panels or Solar Thermal sys | 100% of cost as per invoice, maximum Rs. 35.00 lakhs per project | Credit linked back-ended subsidy @ 35% of the cost, per beneficiary |

**List of documents to be submitted:**

1. Application with Detailed Project Report
2. Affidavit (Format – II (CS/RC))
3. Cold storage unit Firm registration certificate.
4. Electricity connection approvals
5. Proforma Invoice / estimate in the name of cold storage (max eligible admissible cost Rs 35 lakhs per project)
6. Indian Standard codes of the equipment proposed (Engineer certificate).
7. Energy audit report of cold storage unit for a period of last one year.
8. Bank term loan sanction letter and appraisal report.
9. Stock details of Cold storage unit for last one year, duly certified by the Charted Accountant.

The implementation procedure, all terms and conditions and general guidelines for the sub-component cold storage units under PHM shall be applicable for this component also.

# 7. Solar Dryer

Solar drying is a sustainable food preservation method that utilizes solar energy to dry food, reducing spoilage and extending shelf life. it offers several advantages,including nutrient retention, flavor enhancement cost savings and reduced environmental impact compared to traditional drying methods. Solar dryers which can be simple or more complex designs, collect solar radiation and convert it into heat, which is then used to evaporate moisture from food

**Benefits of Solar Drying:**

- ✓ **Sustainability:** Solar drying is an eco-friendly alternative to fossil fuel or electricity-powered drying methods, as it relies on renewable solar energy.
- ✓ **Nutrient Retention:** The gentle drying process in solar dryers helps preserve the natural nutrients and vitamins in food.
- ✓ **Flavor Enhancement:** Solar drying can actually enhance the flavor of certain foods, particularly fruits and vegetables.
- ✓ **Cost Savings:** Solar dryers can significantly reduce energy costs compared. to traditional dryers, especially in areas with ample sunlight.
- ✓ **Reduced Environmental Impact:** By using solar energy, solar drying minimizes greenhouse gas emissions and other environmental pollutants associated with energy production.
- ✓ **Protection from Contamination:** Solar dryers protect food from dust, insects, and other contaminants during the drying process, ensuring a higher quality final product.
- ✓ **Increased Shelf Life:** Solar drying effectively removes moisture from food, which inhibits the growth of microorganisms and extends shelf life says a paper on solar drying.
- ✓ **Versatility:** Solar drying can be used to dry a wide variety of foods, including fruits, vegetables, herbs, spices etc
- ✓ **Economic Advantages:** Solar drying allows farmers to preserve excess produce and sell it off-season at higher prices.

**Types of Solar Dryers:**

| Item | Cost Norms | Pattern of Assistance |
|---|---|---|
| Solar Crop Dryer<br><br>(with 24 Hrs. Backup) | 1. Rs. 2.50 lakh/unit of 70 kg capacity and<br>2. Rs. 3.50 lakh/unit of 100 kg capacity (for a maximum of 5 units per beneficiary) | Assistance @ 40% in General areas and 55% in the case of NE & Himalayan States, TSP areas, Hilly and Scheduled areas, vibrant villages, Andaman & Nicobar and Lakshadweep Islands. |

* In absence of Sunlight availability Power backup should be maintained

**Specifications for Sizes of Solar Dryer:**

1. **70 Kgs:** 15ft L X 4ft W X 6ft H with 2ft Stand
2. **100 Kgs:** 25ft L X 6ft W X 6ft H with 2ft Stand

**Factors Affecting Solar Drying:**

- ✓ **Sunlight:** Adequate sunlight is crucial for effective solar drying.
- ✓ **Temperature and Humidity:** These factors influence the drying rate and quality of the final product.
- ✓ **Air Circulation:** Proper air circulation is essential for removing moisture and preventing mold growth.

## 10. FRONTLINE DEMONSTRATIONS (FLD) :

1. **Emerging Approach in Vegetable Production: Vegetable Grafts:**

**Vegetable production - Vegetable grafts**

- Unit Size: One Acre
- Unit Cost: Rs. 40,000/- per unit
- Subsidy: 75% (Rs. 30,000 per unit)
- No of plants per Ac : 2,000
- Spacing:6 ft x3.5 ft
- Targeted Crops: Brinjal only

**Advantages of Grafted Plants:**

- Resistance to soil borne diseases (Wilt disease).
- Suitable for cultivation in problematic soils like Saline, Sodic & Waterlogging conditions
- Enhanced crop Vigor & extended crop duration results in high yields.

| S. No | Component | Total Cost (Rs.) | Subsidy cost (Rs)@ 75% | Non Subsidy @25% |
|---|---|---|---|---|
| 1 | Grafted Plants @ 2000 grafts per Acre | 20000 | 15000 | RS:-5000/- to be paid by farmer to ADH COE Jeedimetla/Mulugu |
| 2 | Mulching Including Laying charges | 10000 | 7500 | Rs:-2500/-TO be borne by the farmer |
| 3 | Trellising and miscellaneous expenditure | 10000 | 7500 | Rs:-2500/-TO be borne by the farmer |
| **Total** | | **40000** | **30000** | |

- The price of graft for Rs.10/- per each vegetable graft (Rs.8/- as UCP for each vegetable graft + Rs.2/- to meet the maintenance charges at CoE) as per the demand for production of **Brinjal vegetable grafts** ( as per F.Y. 2024-25)
- The DHSOs in the state should place the indents based on your targets communicated to the ADH COE, Jeedimetla/Mulugu prior to 30 days period to supply the vegetable grafts.
- The 25% Non-subsidy portion of Rs.5,000/- pertains to Vegetable grafts of Brinjal which is to be paid to The ADH, COE-Jeedimetla /Mulugu in the form of Demand Draft.

## 2. Summer Vegetable cultivation through low cost protected technology:

**Objective:** To promote vegetable cultivation during summer months by using low cost protected structures (Net house)

- Unit Size: 1248 Sq.m (52m x 24m)
- Unit Cost: Rs. 5.00 lakhs per unit
- Subsidy: 75% (Rs. 3.75 lakhs per unit)

**Protected structure:**

- ❖ 52 m x24 m size tubular structure of 3.2 m height having insect proofing net on all the 4 sides with rollup curtains on two sides with a maximum opening size of 0.9 mt.
- ❖ Top of the structure shall be covered with 40% mono filament Shade net of 100 GSM.
- ❖ Trellising system is also provided in the structure.
- ❖ This unit is suitable for cultivation of vegetables like Tomato, Chilli, Cucurbits during summer months.

**Detailed specifications of the Net house with Cable purlin for Vegetable/ Flowers summer production**

| S.no | Description | Specification | Nos | Qty | Unit | Rate | Amount |
|---|---|---|---|---|---|---|---|
| 1 | Construction of Net House with the above Dimensions as per the detailed list of supplies and works in Annexure A and B | | 1 | 1248 | Sq.m | 339.55 | 500000 |

# OFFER FOR SUPPLY AND CONSTRUCTION OF MODULAR NET HOUSE WITH CABLE PURLIN

| S.No | Description | Qty | Unit | Description | Qty | Unit | GROSS SIZE |
|---|---|---|---|---|---|---|---|
| 1 | GABLE LENGTH | 8 | m | NET GABLE LENGTH | 48 | m | 52 m X 24 m |
| 2 | PURLIN SPAN WIDTH | 4 | m | NET PURLIN WIDTH | 20 | m | |
| 3 | No.OF GABLES | 6 | No | NET SHADE AREA | 960 | sq.m | |
| 4 | No.OF PURLIN SPANS | 5 | No | GROSS GABLE LENGTH | 52 | m | |
| 5 | BALCONY ON FOUR SIDES | 2 | m | GROSS PURLIN WIDTH | 24 | m | 1248 sq.m |
| 6 | Height of Net House | 3 | m | GROSS SHADE AREA | 1248 | sq.m | |

| S.No | Description | Specification | Nos | Qty | Unit | Rate | Amount |
|---|---|---|---|---|---|---|---|
| 1 | Construction of SHADE NET HOUSES with the above Dimensions as per the detailed list of Supplies as per Annexure A. | | 1 | 1248 | sq.m | 339.55 | 423758.40 |
| | | | | | GST + 18% | | 76276.51 |
| | | | | | TOTAL | | 500034.91 |
| | IN WORDS (Rupees Five Lakh Only) | | | | Round off to | | 500000.00 |

## Annexure - A: COST ESTIMATE OF THE MODULAR NET HOUSE WITH CABLE PURLIN

| S.No | Description | Specification | Pkg | Qty | Unit | U.Rate | Amount |
|---|---|---|---|---|---|---|---|
| 1 | BALCONY FOUNDATION | CHS 42mm OD x 2mm/1.2m | | 38 | Nos | 320.00 | 12160.00 |
| 2 | OUTER COLUMN FOUNDATION | CHS 42mm OD x 2mm/0.6m | | 34 | Nos | 180.00 | 6120.00 |
| 3 | INNER COLUMN FOUNDATION | CHS 42mm OD x 2mm/1m | | 20 | Nos | 250.00 | 5000.00 |
| 4 | ALL COLUMNS | SHS 50 X 50 X 2mm/ 3m | | 54 | Nos | 1060.00 | 57240.00 |
| 5 | CORRIDORS/BALCONY PIPES | RHS 40 X 20 X 2mm/3.6m | | 16 | Nos | 800.00 | 12800.00 |
| 6 | CORRIDORS/BALCONY PIPES | RHS 40 X 20 X 2mm/1.5m + 8mm TMT Assly | | 22 | Nos | 500.00 | 11000.00 |
| 7 | Horizontal Members in corridor | RHS 40 X 20 X 2mm/0.8m | | 38 | Nos | 200.00 | 7600.00 |
| 8 | CABLE PURLIN | GI Wire Rope 5mm( in 1 x 19 construction) | | 500 | m | 40.00 | 20000.00 |
| 9 | GALVALUME PROFILE | GI/ 0.6mm and coated with Alumina | | 60 | m | 54.00 | 3240.00 |
| 10 | Zig-zag Spring Insert | High tensile spring wire dia:2.5mm GI | | 90 | m | 10.00 | 900.00 |
| 11 | Roll-up Curtain Mechanisms | 27mm OD Curatain pipe with Rolling Rod and Worm Gear Wheel and retension rope on two | | 1248 | sq.m | 20.00 | 24960.00 |
| 12 | Human -cum - Tractor Entry | Double flap entry with a size of 2.4m x 2.4m | | 1 | set | 16000.00 | 16000.00 |
| 13 | CLAMPS AND HARDWARE | Lumpsum : As per requirement | | 1248 | sq.m | 30.00 | 37440.00 |
| 14 | UV Stabilized Shade Net -50% | Monofilament Type - 125 GSM, Green Color | | 1260 | sq.m | 40.00 | 50400.00 |
| 15 | INSECT Net for Roll-up Rod | 40mesh/105GSM, White Color | | 200 | sq.m | 45.00 | 9000.00 |
| 16 | INSECT Net all Round | 40mesh/105GSM, White Color | | 600 | sq.m | 45.00 | 27000.00 |
| 17 | Trellising System | Lumpsum : As per requirement | | 960 | sq.m | 30.00 | 28800.00 |
| 18 | Civil and Earth Works | Marking + Hole Punching + Cement Mortar + Concrete | | 1248 | sq.m | 20.00 | 24960.00 |
| 19 | Installation Charges | As per the Design and Layout | | 1248 | sq.m | 40.00 | 49920.00 |
| 20 | Transportation Charges of MEN + MACHINES/TOOLS + MATERIALS | | | 1248 | sq.m | Lumpsum | 19220.00 |
| | | | | | TOTAL | | 423760.00 |
| | | | | | GST + 18% | | 76276.80 |
| | | | | | NET PAYABLE | | 500036.80 |
| | | | | | Round off to | | 500000.00 |

## Annexure - B: LIST OF WORKS

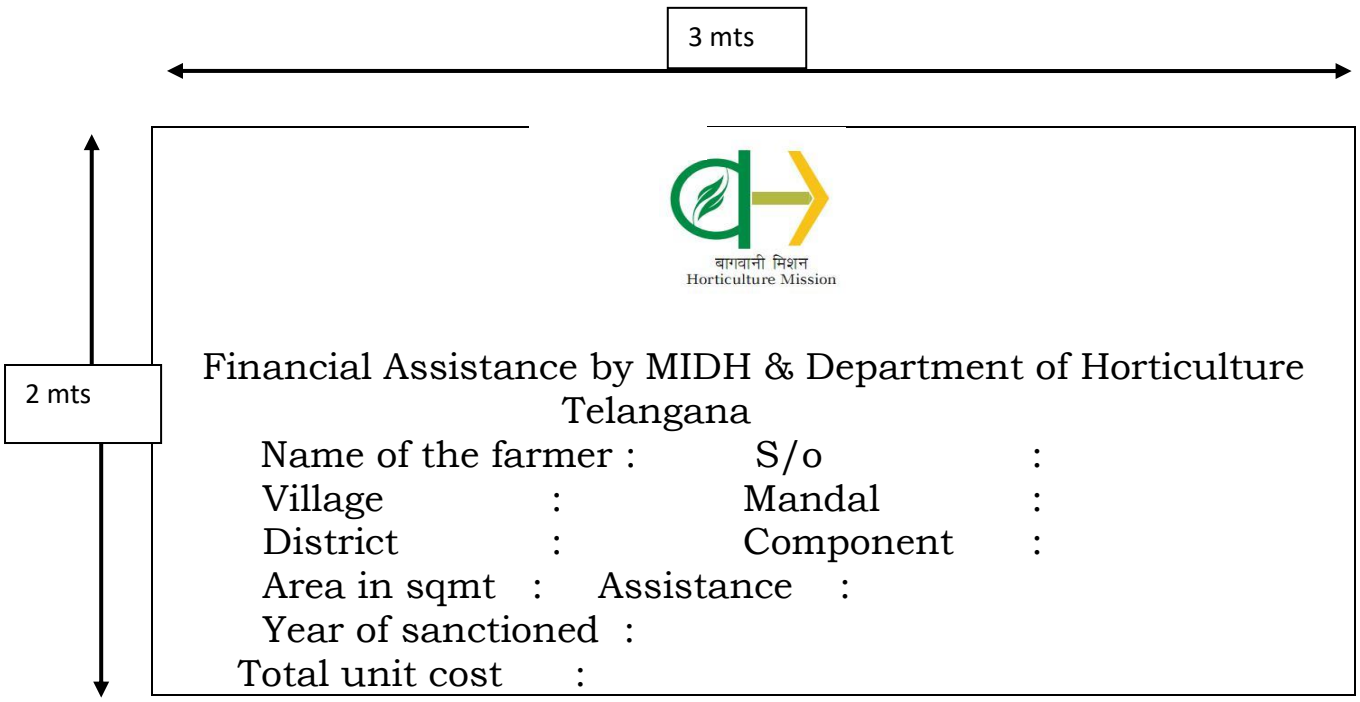
| | |
|---|---|
| 1 | FOUNDATION MATERIALS |
| 2 | Foundation Pits Marking & Digging |
| 3 | Foundation Civil Laying |
| 4 | Trench cutting all along the periphery |
| 5 | DESIGN AND FABRICATION |
| 6 | TRANSPORTATION of MEN+ MACHINES + MATERIALS |
| 7 | INSTALLATION |

**Terms and Conditions are as follows:**

- The estimated project details designed by the technical consultant as per technical standards of MIDH.
- Soil and water analysis reports from reputed labs are also to be enclosed to the proposal.
- Farmer/ Beneficiary is responsible for the erection of the FLD Net House.
- The farmers / beneficiaries are given choice to select the companies / firms for erection of FLD Net House, but the erection of the FLD Net House should be as per technical specifications of MIDH. The Company/ firm and should use BIS/ ISI standard material for erection.
- The farmer/ beneficiary is responsible for any damages to the structure in future.
- A display board depicting "Department of Horticulture", Telangana (Assisted FLD Net House with logo of MIDH).
- The Joint Inspection Team will comprise of DHSO, HO Concerned, Scientist from SKLTSHU, Mulugu.
- Assistance should not be availed from any Government Department. An affidavit duly notarized Rs. 100 stamp paper (format enclosed) to be collected from the farmer along with the proposal.
- Under FLD Net House, Vegetables should be considered for cultivation.
- Documentation with photographs to be done at various stages of erection of FLD Net House and submit to State MIDH cell along with joint inspection report duly indicating the Name of the beneficiary, Extent, Village and Mandal.
- The photograph should clearly depict the board, unit, farmer and also committee members of joint inspection team.
- The beneficiary should utilize the structure for a period of 10 years for the purpose it was sanctioned.

Inspection: The DHSO/ HO should inspect the site at least on and should guide the farmer in all aspects like maintenance of FLD Net House, production practices, marketing status etc.,

Marketing: The Marketing of produce of FLD Net House is the responsibility of farmer.




- The farmer should obtain a certificate undertaking with the following matter from FLD Net House fabricated firm "Certified that the material supplied and Constructed the FLD Net House as per the guidelines and standard fixed by the MIDH and the area constructed in _____ sq mts in the field of Sri/ Smt_____ S/o, W/o. _____ in _____ Village of _____ Mandal of _____ DISTRICT. "

- The farmer should submit affidavit on Rs. 100/- Stamp Paper with notary about the FLD Net House constructed by him

## 11. CENTRE OF EXCELLENCE – ESTABLISHMENT OF NEW CENTRE OF EXCELLENCE FOR PLANTATION CROPS

| Item | Cost Norms* | Pattern of Assistance |
|---|---|---|
| Centre of Excellence for Horticulture Crops | Rs .1500.00 Lakh/center | Assistance @ 100% to public sector. This can be established in technical collaboration under bi-lateral co-operation also. |

## 12.HORTICULTURE MECHANIZATION

Objective:

1. Increasing the reach of farm mechanization to small and marginal farmers and to the regions where availability of farm power is low.
2. Creating hubs for hi-tech & high value farm equipment's.
3. Provide financial assistance to farmers for procurement of farm machinery and implements

**Implementation Procedure:**

- Selection of beneficiaries should be conducted transparently.
- Selected beneficiaries must be registered on the **Suraksha Portal** and to be approved by the District Mission Committee (DMC).
- The farmers/beneficiaries will have their liberty to choose any machine **/equipment and its variants depending on their requirements/choice within the empanelled manufacturers.**
- Sub component wise empanelment list, model wise prices ,authorized dealers list shall be sent to districts
- DHSO/HO should select the farmers with horticulture crop holdings only.
- Priority should be given to the farmers who haven't availed of a subsidy earlier.
- SC, ST, women farmers, and small & marginal farmers to be given priority.
- HO should complete selection, documentation, and registration in a time-bound manner to ensure timely grounding of the component.
- Horticulture Officers (HOs) will scrutinize applications as per the guidelines.

- If the equipment cost is **higher than the approved cost**, the excess must be borne by the farmer.
- If the equipment cost is **lower than the approved cost**, the subsidy will be calculated on the **lower price** (approved cost or actual price, whichever is less).
- Empanelled companies must have equipment tested by FMTTI (Farm Machinery Training and Testing Institute), Garladinne (A.P.) or a DAC-designated institute.
- Farmers shall pay the full cost to the authorized dealer and submit vouchers/bills along with bank account details (Account Number, IFSC) to the HO for subsidy release.
- For tractors and power tillers, RC books must be marked: *"Supplied on Government subsidy of Horticulture Department; not transferable or for sale."*
- During disbursement, HO shall take a digital photo with the farmer, machinery and dealers/Representative of the firm (for tractors & power tillers).
- HOs must maintain the beneficiary data with all the details of the implements/machinery distributed.
- DHSOs/HOs must ensure engraving or painting of supply details (year, batch number, scheme name and other specifications etc.,) on each implement/ machinery at a visible location.
- Do not exceed the assigned targets.
- Strict adherence to SC/ST ratios.
- DHSO should conduct random verification of mechanization components.
- Release subsidy directly to the farmer via online transfer.
- Undertake publicity and campaigns to promote mechanization.
- Document and disseminate success stories.

- Submit success stories, photographs, and videos (high-resolution) in soft and hard copies.

| S.No | Activity | Category | Unit Cost (Rs.) | Pattern of Assistance | Subsidy (Rs.) |
|---|---|---|---|---|---|
| **Horticulture Mechanization** | | | | | |
| **1** | **Tractors** | | | | |
| ii | Tractor 4WD (upto 20 PTO HP) | SC, ST, Small & Marginal farmers, Women farmers | 490000 | 50% | 245000 |
| | | Other farmers | | 40% | 196000 |
| **2** | **Power Tillers** | | | | |
| i | Power Tillers (8 BHP & upto 11 BHP) | SC, ST, Small & Marginal farmers, Women farmers | 200000 | 50% | 100000 |
| | | Other farmers | | 40% | 80000 |
| **3** | **Self Propelled Machinery - Horticultural Machinery** | | | | |
| i | Power weeder (Engine Operated 5 BHP and below 7.5 BHP) | SC, ST, Small & Marginal farmers, Women farmers | 150000 | 50% | 75000 |
| | | Other farmers | | 40% | 60000 |
| ii | Brush Cutter (Electric / Engine Powered) | SC, ST, Small & Marginal farmers, Women farmers | 50000 | 50% | 25000 |
| | | Other farmers | | 40% | 20000 |
| **4** | **Plant Protection Equipment** | | | | |
| i | Powered Knapsack Sprayer / Power Operated Sprayer Capacity above 16 Litres ( >1 HP engine) | SC, ST, Small & Marginal farmers, Women farmers | 20000 | 50% | 10000 |
| | | Other farmers | | 40% | 8000 |

## 13. MARKETING INFRASTRUCTURE

| S. No. | Component | Unit | Unit cost (Rs. In Lakh) | Assistance (Rs. In Lakh) | Pattern of Assistance |
|---|---|---|---|---|---|
| I | Rural Primary Market / Apni Mandies | No | 25.00 | 10.00 | Back-ended 40% of the capital cost of project in general areas and 55% in Scheduled areas |
| 2 | Static / Mobile Vending Cart / Platform with Cool Chamber | No | 0.30 | 0.15 | 50% of unit cost. |
| 3 | Retail Markets / Outlets (environmentally controlled) | No | 20.00 | 7.00 | Back-ended 35% in General areas and 50% in scheduled areas |
| 4 | Modified retail refer van with retail counter (to be linked with Integrated Pack house) | No | Rs. 20.00 lakh with loading capacity of 3 MT | 7.00 | Assistance @ 35% in General areas and 50% in the case of NE & Himalayan States, Scheduled areas, vibrant villages, Andaman & Nicobar and Lakshadweep Islands. |

## i. RURAL PRIMARY MARKETS/APNI MANDIES

The horticulture crops namely fruits, vegetables and flowers etc. are perishable in nature and need immediate disposal for providing remunerative prices to the farmers. For efficient marketing facilities to orchardist at the local level, NHM provides Credit linked back-ended subsidy @ 25% of the capital cost of project to panchayats, societies, private entrepreneurs and local bodies for establishment of Rural Primary

Markets and Apni Mandies. The identified items of infrastructure for Rural Primary Markets/Apni Mandies are as under.

**Rural Primary Markets/Apni Mandies**

1. Office building
2. Auction/drying platforms - two to three per market
3. Water supply & sanitary arrangements as per requirement.
4. Grading equipment
5. Weighing equipment
6. Wastage disposal system
7. Boundary wall and internal roads

## CHECK LIST

| S. No. | DESCRIPTION | REMARKS |
|---|---|---|
| 1. | Application Form along with Appraisal Report | |
| 2. | Basic Data Sheet with Complete Technical Aspects | |
| 3. | Detailed Project Report MIDH Guidelines | |
| 4. | Partnership Deed (MoU) | |
| 5. | Land Document (Sale Deed / Lease Deed / Pattadar Pass Book copy) | |
| 6. | Firm Registration Certificate | |
| 7. | Bank Sanction Letter along with appraisal Report | |
| 8. | Approval from Gram Panchayat / Municipality / Town Planning | |
| 9. | Land Conversion Certificate | |
| 10. | SSI Registration Certificate | |
| 11. | Fire Department Approval with drawings | |
| 12. | PAN Card Copy of the unit | |
| 13. | Electricity Approval | |
| 14. | KYC documents of all the Partners | |
| 15. | DMC Approval | |
| 16. | Promoter's Affidavit as per Prescribed Format | |
| 17. | Certificate from Bank for Non-Availing Subsidy from any other State/Central Govt. Department. | |
| 18. | Insurance of the Fixed Assets | |

**Format for submission of Application for Rural Primary Market and Apni Mandies.**

1. Name of the Rural Primary Market/ Apni Mandi.

2. Ownership of Market.

3. Location
   a) District
   b) Tahsil

4. a) Whether the market is located in Tribal/ Hilly area (Attach documentary proof)
   b) Whether the market has availed financial Assistance for development from Central Sector Projects, full details of assistance Received.
   c) Frequency at which the market is operating i.e. daily, bi-weekly, etc. If seasonal, then give number of days the market function during the season.
   d) Whether the market is regulated.
      i) If so, the name of the Market Committee under which it is functioning.
      ii) If not regulated, the name of the local body managing it.
   e) Whether the market is served by roads linking with the regulated market.

5. Present annual arrivals (Last financial year)

| Sl. No. | Name of the Facility | No. / Area & Capacity | Cost per unit | Total Cost |
|---|---|---|---|---|
| A | Office-cum-Godown | | | |
| B | Auction/Drying platform | | | |
| C | Water & Sanitary arrangements | | | |
| D | Grading & weighing equipments | | | |
| E | Boundary wall | | | |
| | **Total cost of the Project** | | | |

6. Sources of financing the project.

1. Contribution from promoters/ own fund
2. Contribution from state/ Marketing board
3. Central assistance _____ Total _____

If additional funds are required over and above of Central Assistance, the sources from which these would be met i.e. own funds, State marketing Board, Bank, Loan, contribution of promoter, contribution from members of society and panchayat etc. may be indicated with documentary proof.

7. Financial position of the Market Committee under which the rural primary market is functioning or to which it will be linked.

**Last financial year** **(Rs. in lakhs)**

| Year | Opening Balance | Income during the year | Total | Expenditure during the year | Closing balance (surplus or deficit) |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| | | | | | |

8. Rate of market fee levied, if any.

Signature

Chairman

Signature of SHM

Committee / local body
Place:
Date:

Note:-

a) A lay out plan of the market according to the scale indicating therein in the facilities Already available and proposed to be provided in the market may be enclosed.

b) Copy of the UC of the market which has already received Central Assistance under the erstwhile scheme of CA for which UC has been furnished.

## PRELIMINARY INSPECTION REPORT FOR RURAL PRIMARY MARKET / APNI MANDIS

Date of Inspection :

A Component :

B **Details of Project** :
(iii) Name of the project :
(iv) Address for communication with telephone No. :

C **Project Location with Address** :
(i). Survey No :
(ii). Village :
(iii). Mandal :

D Constitution (Individual/ Joint Individual/Partnership Firm/ Company. :

E (i) Proposed Activity :
(ii) Type :
(iii) Proposed type of cooling system :

F Name of the Promoter :

G **<u>Present physical status of the project:</u>**
I. Construction started or not :
(i) Land development status/boundary/road :
(ii) Connecting road to the plot :
(iii) Stage of unit building civil / pre-engineered as on inspection date :
(iv) Type of produce to be stored

Promoter Horticulture / MI Engineer Horticulture Officer DHSO

**FORMAT TO CONDUCT FINAL AND JOINT INSPECTIONFOR RURAL PRIMARY MARKET / APNI MANDIS BY THE COMMITTEE UNDER POST HARVEST MANAGEMENT COMPONENT OF MIDH, T.G.**

**1) GENERAL INFORMATION**

1) Name of the Unit with full address : (Sy. No. / Area / Village / District)

2) Date of Issue of Administrative Sanction :

3) Name of CEO of Company / Managing Director :

4) Constitution: Individual / Group of Individuals / : Society / Partnership Firm / Pvt. Ltd. Company / : Public Ltd. Company :

5) Date of Inspection of the Project :

6) Name & Designation of the Committee members :

(a)

(b)

(c)

(d)

7) Name of the Bank (with Full address & Phone & Fax No.) : :

**a)** Subsidy reserve fund account no. :

8) Date of start of the project :

9) Date of Completion of the project :

10) a) Date & amount of Sanction of Term Loan :

b) Repayment Period :

11) Land Details

i. Whether land is in the name of promoter : Yes / No

ii. Whether land is a Regd. Lease land for : Yes / No Minimum 10 years in favour of applicant (in case of lease)

| | | | | |
|---|---|---|---|---|
| **Name & Signature of Applicant** | **Name & Signature Signature of Expert concerned** | **Name & Signature of Inspecting Officer from MIDH** | **Name & of DHSO** | **Name & Signature of Senior Officer** |
| **(Bank)** | | | | |

**FORMAT**

**(Forwarding letter of Bank for Conducting JIT) Name &Full Address of the FI/Bank (on letter head)**

**To**
**The Mission Director & Commissioner of Horticulture, Govt. of Telangana,**
**Public Gardens, Nampally, Hyderabad**

**Subject : Request for Joint Inspection of the project**

Sir,

MIDH, T.G., had released Rs.……as credit linked back-ended subsidy in respect of project of_____Village District State Vide letter no…….. As per instruction,the subsidy amount has been kept in Subsidy Reserve Fund account of the bank and interest benefit is being passed on to the beneficiary. Now project is complete as per original proposal and we have also disbursed fullTerm loan sanctioned for the above mentioned project. In addition to documents submitted by bank at the time of claim of subsidy such as copy of the Appraisal Note, Term Loan sanction letter, copy of Record of Right, following documents required for Joint Inspection are being submitted with the request to conduct Joint Inspection of the project to decide final subsidy claim.

| S. No | Particulars | Enclosed or Not |
|---|---|---|
| 1 | Details of date-wise release of term loan | |
| 2 | Completion certificate by Bank/FIs | |
| 3 | Undertaking from promoter (as prescribed by NHM) | |
| 4 | Extract of subsidy reserve fund account of bank in which estimated subsidy has been kept | |

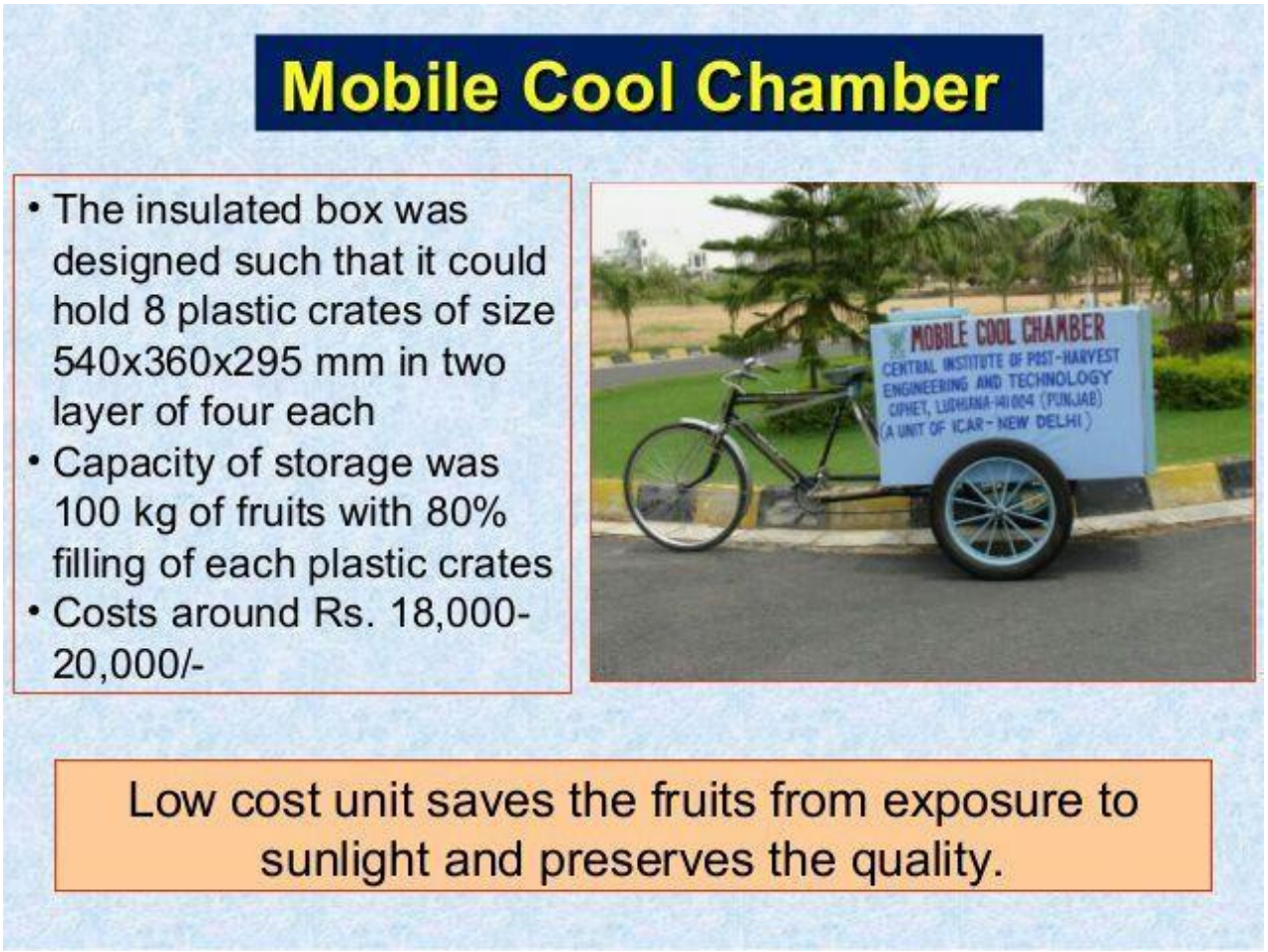
It is certified that the original of above documents and documents submitted at the time of subsidy claim by bank pertaining to the project share kept in Bank/FI, which can be shown at the time of random monitoring by the Department or any agency authorized by the Department.

**(Seal and Signature of the Bank's Officer)**
**Name: _____**
**Name of the Bank:**
**Address:**
**Phone/Fax/Mobile No.: _____ Place: __**
**Date: _____**

## ii.STATIC / MOBILE VENDING CART / PLATFORM WITH COOL CHAMBER

**PATTERN OF ASSISTANCE:**

**Unit Cost Rs.30,000/- per unit Subsidy @ 50% of the unit cost.**



## APPLICATION FOR AVAILING ASSISTANCE / SUBSIDY UNDER MIDH

## (COMPONENT: STATIC / MOBILE VENDING CART / PLATFORM WITH COOL CHAMBER)

**Name of the Scheme**: **Post Harvest Management**

| | | |
|---|---|---|
| 1 | Name of the Farmer | **:** |
| 2 | Father / Husband Name | **:** |
| 3 | Caste (SC/ST/BC/OC) | **:** |
| 4 | Address: | **:** |
| | Phone / Cell No.: | **:** |
| 8 | Whether any Govt. Subsidy availed previously | **:** |
| 9 | Any other relevant information | **:** |

Declaration

I, _____

declare that the particulars furnished above are true to the best of my knowledge and I promise that the benefit obtained from State MIDH Cell will be used for the purpose for which it is given and in case of misuse I am liable for any action deemed to be fit by Govt. of T.S., including recovery of the subsidy amount with 12% interest to the Government.

Enclosures: 1. Affidavit
2. Pattadar Pass Book

**Signature of the Farmer / Entrepreneur.**

Recommendations of the Horticulture Officer: _____

**Horticulture / MI Engineer** **Horticulture Officer**

**DHSO**

**PRELIMINARY INSPECTION REPORT FOR STATIC / MOBILE VENDING CART / PLATFORM WITH COOL CHAMBER**

Date of Inspection :

A Component :

B **Details of the unit** :
(i) Name of the beneficiary :
:
(ii) Address for communication with telephone No. :

C **Project Location with Address** :
:
(i). Survey No :
(ii). Village :
(iii). Mandal

D Constitution (Individual / Joint Individual. :
:
:

E (i) Proposed Activity :
:
(ii) Type :

(iii) Proposed type of cooling System

F Name of the Promoter :

G **<u>Present physical status of the unit :</u>**

Promoter Horticulture / MI Engineer Horticulture Officer DHO

**FORMAT TO CONDUCT FINAL AND JOINT INSPECTIONFOR STATIC / MOBILE VENDING CART / PLATFORM WITH COOL CHAMBER BY THE COMMITTEE UNDER POST HARVEST MANAGEMENT COMPONENT OF MIDH, TG.**

## 1) GENERAL INFORMATION

1) Name of the Unit with full address : (Sy. No. / Area / Village / District)
2) Date of Issue of Administrative Sanction :
3) Name of the beneficiary :
4) Constitution: Individual / Group of Individuals :
5) Date of Inspection of the Unit :
6) Name & Designation of the Committee members : (a)

(b)

(c)

(d)

7) Name of the Bank (with Full address & : Phone & Fax No.) :
8) Date of start of the unit :
9) Date of Completion of the unit :

**Name & Signature (Bank)** **Name & Signature of Applicant** **Name & Signature of DHSO concerned** **Name & Signature of Expert of Senior Officer** **Name & Signature of Inspecting Officer from MIDH**

## 14. ORGANIC FARMING

| Item | Cost Norms* | Pattern of Assistance |
|---|---|---|
| i. Vermi compost Units/Vermibed | Rs.1,00,000/ unit for permanent structure & Rs. 16,000/unit for HDPE Vermibed. | Assistance @ 50% conforming to the size of the unit of 30'x8'x2.5' dimension of permanent structure. For HDPE Vermibed, @ 50% conforming to the size of 96 cft (12'x4'x2') and IS 15907:2010 |

## 15. ADD-ON COMPONENT

| Item | Cost Norms* | Pattern of Assistance |
|---|---|---|
| Add on Components: | | |
| i. Hydroponics and Aeroponics | Rs. 350/- per Sq.mt. Above rates shall be15% higher in the case of NE & Himalayan States, Scheduled areas, vibrant villages, Andaman & Nicobar and Lakshadweep Islands. | Assistance @ 50% for a maximum area of 1000 sqm per beneficiary or on pro-rata basis for smaller areas. |
| ii. Fruit/Bunch cover (Paper /Non- woven cover/Paper bags etc | Rs. 0.50 lakh/ha Above rates shall be15% higher in the case of NE & Himalayan States, Scheduled areas, vibrant villages, Andaman & Nicobar and Lakshadweep Islands. | Assistance @ 50% for all farmers for maximum area of 2 ha per beneficiary or on pro-rata basis for smaller areas. |
| iii. Weed Mat | Rs. 50 per Sq.mt. Above rates shall be15% higher in the case of NE & Himalayan States, Scheduled areas, vibrant villages, Andaman & Nicobar and Lakshadweep Islands. | Assistance @ 50% for all farmers for maximum area of 4000 Sq.mt. per beneficiary or on pro-rata basis for smaller areas. |
| iv.Anti Bird/Anti Hail Nets | Rs. 50 per Sq.mt. Above rates shall be15% higher in the case of NE & Himalayan States, Scheduled areas, vibrant villages, Andaman & Nicobar and Lakshadweep Islands. | Assistance @ 50% for all farmers for maximum area of 10000 Sq.mt. per beneficiary or on pro-rata basis for smaller areas. |

# 16. SPECIAL INITIATIVES

## BANANA FRUIT CARE ACTIVITY

Unit Cost: Rs.55,000/- per Ha. Assistance (50%): Rs.25,500/- per Ha.

**Fruit Care Activities for Banana Crop:**

| The details of allowed assistance for Fruit care activities in Banana | | | | | | |
|---|---|---|---|---|---|---|
| | | | | | | **Rs.in Lakh** |
| **S.No** | **Component Head** | **Component Details** | **Unit** | **Unit cost** | **Assistance allowed** | **Assistance amount** |
| 1 | Fruit Care | Labour for performing specific fruit care activities for quality production - Bud injection, Fruit obstacle removal, De flowering, Bunch Spray, Removal of false hand, placement of skirting bags, Ribboning | Ha | 0.20 | 50% | 0.10 |
| | | Cost of skirting bags (Bunch sleeves) | Ha | 0.30 | 50% | 0.15 |
| | | Cost of Ribbon | Ha | 0.01 | 50% | 0.01 |
| | | Chemicals for BI & Bunch spray | Ha | 0.01 | To be borne by farmer | |
| | | BI/BS Pump, Lances and Needles | No | 0.03 | To be borne by farmer | |
| | | **Sub Total** | | **0.55** | 50% | 0.25500 |

* Allowed assistance for Fruit care activities for 1 Ha is Rs. 0.25500 lakhs

# 17. HUMAN RESOURCE DEVELOPMENT

## 1. Training of Farmers - Within the State

**Pattern of Assistance:**

| Sl. No. | Particulars | Unit | Unit cost | Pattern of Assistance |
|---|---|---|---|---|
| 1 | Training of Farmers - Within the State | No | Rs.1000/- day per farmer including transport | Assistance 100% of the cost (max. 5 days) |
| 1 | Training of Farmers - Outside the State | No | Project based as per actual | Assistance @ 100% as per actuals. (max. 7 days including Journey) |
| 2 | Farmers Training/Exposure Visit outside India | No. | Upto a maximum of Rs.1.5 Lakh/Participant | Project Based. Assistance @ 100% of economic air/rail travel. Course fee cost to be funded under Mission Management. (Proposal shall be considered by MIDH Division, DA&FW Only) |
| 3 | Training of Officers/ Technical Staff within State | No. | Rs.300/- day per per participant including TA/DA as admissible | Assistance 100% of the prescribed cost norms |
| 4 | Study tour to outside State | No | Rs.1000/- day per per participant including TA/DA as admissible | Assistance 100% of the prescribed cost norms |
| 5 | Training of Officers/ Technical Staff to Outside India | No. | Upto a maximum of Rs.1.5 Lakh/Participant | Project Based. Assistance @ 100% of economic air/rail travel. Course fee cost to be funded under Mission Management. (Proposal shall be considered by MIDH Division, DA&FW Only) |

All capacity building programs shall be as per Qualification Pack (QP) of ASCI and only needs to be run in ASCI accredited training Institutes. Required entry of achievement needs to be done on Skill India portal.

1. Training programme shall be of one day duration and shall focus on crop management during flowering, fruiting stage and pest & disease management.

2. The Training programme shall be held within the state. If feasible / possible a field visit of the farmers shall be organized to the neighboring districts to educate the farmers on latest technologies adopted. The expenditure per training shall not exceed Rs.25,000/- per batch of 25 farmers (component wise indicative cost given below).
3. Programme to be documented in coordination with divisional / mandal PRO and photographs of local newspaper/ video clippings to be sent to SHM at the end of the month along with progress report including banner.
4. Suitable resource persons shall be identified for imparting training based on the Subject. The resource person shall be either Scientists from DAATT Centre or from nearby Agriculture /Horticulture research stations of Prof. Jaya shankar Agril. University or SKLTS Horticulture University.

| S.No | Component | Assistance @ Rs.25,000/- per training a batch of 25 farmers within State |
|---|---|---|
| 1 | Study material ( Reading and writing material, CDs) | 2000/- |
| 2 | Honorarium to faculty members / resource persons. | 3000/- |
| 3 | Expenditure on food | 5000/- |
| 4 | Travelling expenses | 6000/- |
| 5 | Miscellaneous, contingent exp. | 9000/- |
| | **Total** | **25,000/-** |

## Non-Negotiables for Conducting Training Programme to the Farmers

1. The districts have to identify the training needs of the horticulture farmers in the district keeping in view, the horticulture profile, productivity pattern, incidence of pest, post-harvest practices and other such relevant issues.
2. The farmers / beneficiaries identified under MIDH especially, for Area expansion, Protected Cultivation, Front line Demonstrations shall invariably be covered under HRD program.
3. The DHSO/HO shall identify resource persons including retired personnel of Horticulture dept., KVK's, progressive farmers and their services can be used by paying honorarium.
4. Providing written literature in Telugu on the training subject to the trainees is a shall. **If training is conducted without giving the written literature, it shall not be considered as training for getting assistance.**
5. Feedback of the farmers on the usefulness of the training shall be obtained in specially designed feedback forms or in a register along with the signatures of the participants.
6. Documentation like photograph shall be taken for each training program. Press publicity shall be given on these training programs.
7. The DHSO/HO shall attend every training programme as this shall give an opportunity to interact with farmers and get feedback on horticultural issues.
8. Attendance register of the farmers shall be maintained by each officer.

Recent
Passport Size
Photograph

**DEPARTMENT OF HORTICULUTURE-**
**GOVERNMENT OF TELANGANA**

## Mission for Integrated Development of Horticulture 2025-26
## Reference Application Format for Availing Subsidy

| | | | |
|---|---|---|---|
| **1** | Application No. | : | |
| **2** | Online ID No | : | |
| **3** | Name of the Scheme/ Component | : | |
| **4** | Name of the Crop | : | |
| **5** | Name of the farmer | : | |
| **6** | Name of the Father/Husband | : | |
| **7** | Village | : | |
| **8** | Mandal | : | |
| **9** | District | : | |
| **10** | Survey No | : | |
| **11** | Land (Leased/Owned) | : | (if owned pattadhar passbook) |
| **13** | Total Area (in Ha) | : | |
| **14** | Proposed Area (in Ha) | : | |
| | No of Plants per Ha | : | |
| | Spacing (in meters) | : | |
| **13** | SF/MF/BF | : | |
| **14** | Category: | | General/BC/SC/ST |
| **15** | Soil Type | : | Red soils/Black soils/Red loamy soils/Sandy soils |
| **16** | Source of Irrigation | : | (Bore well/open well) |
| **17** | Drip Irrigation | : | Yes/No |

| | | |
|---|---|---|
| **18** | Total Amount for Non-Subsidy | **:** |
| **19** | DD No. for Non- Subsidy amount | **:** |
| **20** | Whether any Govt. Subsidy availed previously | **:** |
| **21** | Bank Account Number | **:** |
| **22** | Name of the Bank | **:** |
| **23** | Name of the Branch | **:** |
| **24** | IFSC Code/RTGS Code | **:** |
| **25** | Mobile number | **:** |

## Declaration

I, _____

declare that the particulars furnished above are true to the best of my knowledge and I promise that the benefit obtained from State Horticulture Mission shall be used for the purpose for which it is given and in case of misuse I am liable for any action deemed to be fit by Govt. of Telangana including recovery of the subsidy amount with 12% interest to the Government.

**Signature of the Farmer / Entrepreneur.**

Recommendations of the

**Horticulture Officer** _____.

## Receipt

Received an application of Sri/Smt _____ S/o./D/o._____(V)_____, (M)_____, Dist_____. On _____ for _____ scheme and this application shall be considered after field verification on First come First serve Basis.

**Horticulture Extension Officer** **Horticulture Officer**

## MIDH - MONTHLY GANTT CHART - 2025-26

| TASK | Activities During Months | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | April | May | June | July | August | September | October | November | December | January | February |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| **Area Expansion-Fruits** | Identification of beneficiary | Collection of application of the selected beneficiary & registration in SURAKSHA portal | Pitting & Issue of Admin sanction, Booking of expenditure | Plantation, Booking of expenditure | Physical verification, Collection of bills & uploading of bills & photos in SURAKSHA portal | Final approval for release of funds by District Collector and beneficiary list of the same to be submitted to DoH office | Release of funds from districts through DBT | | | ---- | |
| **Area Expansion-Vegetable** | | Selection of eligible beneficiary | Registration & Admin sanction | Plantation, | | | Release of funds | Placing of indents | | Forwarding proposals for approval | |
| **Area Expansion-Flowers** | | | Placing of indents to CoEs . | Booking of expenditure | | | | Release of funds to COEs from districts | | | |
| **Area Expansion-Spices** | | | | | | | | | | | |
| **II & III Year Maintenance** | Survival verification | Estimation of Gap filling | Preparation of beneficiary list, Booking of expenditure | Final DMC approval for release of funds, Booking of expenditure | Forwarding proposals to DoH for approval, Release of funds from districts through DBT | ---- | | | | | |
| **Rejuvenation** | Identification of beneficiary | selection of eligible beneficiary | Implementation of Rejvenation activity, Registration & Admin sanction | | Physical verification, Collection of bills & uploading of bills & photos in SURAKSHA portal | Final approval for release of funds by District Collector and beneficiary list of the same to be submitted to DoH office | Release of funds from districts through DBT | ---- | ;--- | - | |
| **Protected Cultivation - Mulching** | | | Registration & Admin sanction | Booking of expenditure | | | | | | | |
| **Protected Cultivation - Poly House/ Shadenet** | | | | Erection | Plantation, Physical verification | Collection bills & uploading of bills in portal | Release of funds from Head office in case of Ripening chambers, through DBT | | | | |
| **Farm Ponds** | | | | | Laying of sheet | Collection bills & uploading of bills in portal | Release of funds from districts through DBT | | | | |
| **Pollination Support through BEE Keeping** | | | | Implementation | Physical verification, Collection of bills & uploading of bills & photos in SURAKSHA portal | Final approval for release of funds | | | | | |
| **Frontline Demnstration** | | | | | | | | | | | |
| **PHM** | | | | | | | | | | | |

## TIME LINE – 2025-26

| Mission for Integrated Development of Horticulture (MIDH) | | | |
|---|---|---|---|
| **S. No** | **Component** | **Action** | **Time frame** |
| 1 | Committed Liabilities | Submission of release proposals. | 10.06.2025 |
| 2 | Plantation Infrastructure Development | Proposals to be submitted for placing before SLEC | 20.05.2025 |
| | | Grounding & submission of release proposals for both 1st & 2nd instalment | 31.08.2025 |
| | **Identification of Beneficiaries of all components** | | 26.04.2025 |
| 3 | **Area Expansion** | | |
| a | Area Expansion of Fruits | Grounding & Submission of final Release proposals | 31.07.2025 |
| b | Area Expansion of Flowers | | |
| c | Area Expansion of Spice | | |
| d | Area Expansion of Vegetables | Month wise plan of action & Indent to be placed to COEs | 05.06.2025 |
| | | Grounding & Submission of final Release proposals | 15.07.2025 |
| 5 | 2nd & 3rd year maintenance | Grounding & Submission of final Release proposals | 31.07.2025 |
| 6 | Rejuvenation | Grounding & Submission of final Release proposals | 20.07.2025 |
| 7 | Creation of Water resources (Farm ponds) | Grounding & Submission of final Release proposals | 01.07.2025 |
| 8 | Protected Cultivation- Poly Houses/ Shade net Houses | Proposals to be submitted for placing before SLEC | 20.05.2025 |
| | | Grounding & submission of release proposals for both 1st & 2nd instalment | 01.09.2025 |
| 9 | Protected Cultivation- Mulching | Grounding & Submission of final Release proposals | 15.07.2025 |
| 10 | Pollination support through Beekeeping | Grounding & Submission of final Release proposals | 10.11.2025 |
| 11 | Frontline Demonstrations | Grounding & Submission of final Release proposals | 31.12.2025 |
| 12 | | Proposals to be submitted for placing before SLEC | 20.05.2025 |

| Mission for Integrated Development of Horticulture (MIDH) | | | |
|---|---|---|---|
| **S. No** | **Component** | **Action** | **Time frame** |
| | Integrated Post Harvest Management & Seed Processing Unit | Grounding & submission of release proposals for both 1st & 2nd instalment | 31.08.2025 |
| 13 | Human Resource Development | Grounding and submission of UC | 31.01.2026 |

Director of Horticulture
Telangana