IMPLEMENTATION GUIDELINES

2019-20

MIDH, HORTICULTURE DEPARTMENT TELANGANA

MISSION FOR INTEGRATED DEVELOPMENT OF HORTICULTURE (MIDH)
IMPLEMENTATION GUIDELINES - 2019-20

A. Norms & Pattern of Assistance and Popularization of Scheme

1. Norms would be as per the norms of Mission for Integrated Development of Horticulture – Operational Guidelines, April-2014, GOI. The guidelines are described in subsequent pages of this booklet.
2. 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 above schemes strictly as per the guidelines issued by Govt. of India /State Government from time to time.
3. Component is to be implemented as per the rates circulated, firms empanelled and instructions issued by Director of Horticulture and Mission Director, MIDH from time to time.
4. The District-level targets communicated by the O/o. Director of Horticulture shall further be divided HO wise & Mandal wise by the DHSOs and taking into view the potential.
5. Schemes shall be popularized mainly through existing extension network of the department and other resources available to them. Extensive publicity shall be given for awareness of the programmes

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 available only for Horticultural crops as per the GOI norms and guidelines
3. Farmers could procure material from any Govt. Farms / Research Stations / accredited nurseries of their choice.
4. Subsidy will be admissible both in loan and non-loanee cases.
5. Subsidy in loan cases would be released to the beneficiary account or loan account as the case may be.

6. Subsidy on plantation/cultivation would be admissible only to the beneficiary having an assured source of irrigation (tube-well/water tank supported with engine).

C. Procedure for availing assistance

1. The farmer-applicant will submit application to the DHSO in the prescribed format.
   i. **Form-1 in case of non-project-based activities**
   Beneficiary can register details through online in Hortnet or submit the application to DHSO office through **HO's/ HEO's** along with required documents.
   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 ensuing SLECs to get approvals as per delegation of powers communicated by GoI**.
2. **Checklist & Documents** to be enclosed for Project Based Proposals annexed at the respective component guidelines.

D. Record of Applications and dispersals.

1. The details of beneficiary shall be entered in HORTNET 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, **he/she** shall also issue a receipt to the applicant indicating the Serial Number / Hortnet ID and date of receipt of the application.
2. The HOs will verify the application form submitted by the farmer/applicant and forward it to the DHSO of the concerned district along with **his/her** recommendation within 3 days of the receipt thereof. HO will ensure that proper checklists and documents are enclosed as prescribed under the guidelines.
3. In case of more applicants "**FIRST COME FIRST SERVE**" policy will be adopted. HO, DHSO will keep proper record of applications.
4. The DHSO will get the applications registered online, as well maintain hard copies of the same, only after proper scrutiny that-
   i. The farmer-applicant belongs to the concerned district/holding land in concerned district.
   ii. The farmer-applicant is not being given the benefit for the second time for the same component.
   iii. Any farmer/applicant who has been benefitted under any scheme since 2009-10 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 his/ her jurisdiction. 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 would 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 will accord the approval of case within 7 days of receipt from office.
7. Roster register will be maintained by concerned DHSO officer. He/She will issue the slip to the farmer mentioning his/her seniority number after obtaining signature of the concerned farmer in roster/ seniority register.

E. Implementation including Physical Verification

1. In case of components *viz.,* Area Expansion, Poly houses/ Shade net Houses, post-harvest units and other physical structures, proper verification shall be done by the HO, DHSO in the prescribed format. The physical verification shall be done as per the guidelines prescribed and specifications issued by the SHM Cell, Head office. The physical verification and the report thereof should 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 should be followed:

i. DHSO/DHM should make advance arrangement for procurement of planting material from accredited nurseries/certified planting material/certified seeds for ensuing season. DHSO/DHM should 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 should 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 should 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 equipments from empanelled

firms under MIDH as per conditions prescribed under the specifications**.**

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

v. The <u>physical verification</u> of the material/input purchased will be carried by the team of HEO/HO/DHSO in the prescribed format.

vi. The physical verification report should reach the office of DHSO within 5 days of purchase.

vii. Display board depicting details of the Scheme (as per applicability) in Telugu should be fixed at the Site with size 25 ft X 10 ft for PHM&PC components and 4 ft X 2 ft for other 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. **<u>Criteria for release</u>:** Physical inspection as described below must be done within 15 days of work completion:
   i. In case of non-project-based activities: 100% verification by the **HO & HEO** in all the cases in his jurisdiction, 20% - 50% verification by DHSO concerned in his/her jurisdictions.
   ii. In case of farm ponds: the work executed shall be duly verified by the committee so constituted.
   iii. 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.

iv. Stage wise digital photos to be taken before work, at the time of work and after completion of work.

2. <u>Release</u>:

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

ii. Subsidy proposal to be submitted within 7 days of physical inspection report duly obtaining DMC approval.

iii. 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.

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

v. 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 will be released through online to the beneficiary only.

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

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

G. Reporting:

i. DHSO will maintain the subsidy account and send the list to SHM Cell at Head office monthly on or before 3rd of every month in prescribed format.

ii. DHSO shall maintain the list of beneficiaries through HORTNET and the same shall be sent to SHM Cell at Head office on or before 3rd of every month.

iii. DHSO shall send the physical and financial progress of his/her district monthly in prescribed format on or before 3rd of every month.

3. The **<u>DHSO will be the controlling officer</u>** 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 will also ensure that, the scheme is duly publicized in the district immediately after the targets are allotted.

i. Wide publicity should 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 will be given prior training at districts.
iv. Only the farmers willing to take-up training on particular schemes should be selected for subsidy programmes.

NON-NEGOTIABLES FOR IMPLEMENTATION OF MIDH SCHEMES 2019–20

1. Identification of beneficiaries should be done as per guidelines given under each scheme.
2. Identification of beneficiaries as per targets allotted to be completed as per season only.
3. It should be ensured that **15.44 % and 9.34 % funds are to be targeted for SC and ST farmers respectively** and **33% of budget allocation** should be earmarked exclusively **for women** beneficiaries/ farmers.
4. Only Cluster approach will 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 scheme training to be organized at field level.
6. Approval of District Mission Committee (DMC) is mandatory for implementing **each** schemes, 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.
7. **Filing of applications in Hortnet is mandatory for all components towards release of funds. The DHSO should see that Aadhaar card No and Mobile No. should compulsorily be entered.**
8. The plantation should 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 should be organized under all components, specifically, Post harvest management, Special Interventions.
11. The Projects proposed under Post Harvest Management, Special Interventions should 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 should be sent after approval of DMC and the proposals should be sent to Head office as per timeline indicated.
13. To ensure transparency separate account should be maintained at District Level for collection of non -subsidy.
14. All the identified beneficiaries should have a valid **Bank account**. Otherwise they have to open a bank account. The bank account

number, IFSC code etc., have to be verified by the DHSO/HO concerned personally before updating in **Hortnet**.

15. DHSOs should ensure the bills produced by the beneficiaries are from the registered firms/companies, before forwarding release proposal to head office.
16. **The assistance will be given taking family as a unit.**
17. It is the responsibility of DHSO to update the progress reports on 3rd of every month. It is compulsory.
18. Bounded hard copies of all the schemes implemented in the districts along with the photographs have to be kept in office. Stage wise Photographs have to be uploaded in HORTNET.
19. It is mandatory to submit the success stories / case studies of each year along with photographs.
20. 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 2019-20

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 news papers, 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.Ps / M.P.Ps 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 should 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 should be earmarked exclusively for women beneficiaries. No deviation is permitted.
8. 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.
9. 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)

10. DMC approval has to be obtained by the District Committee for Additions /Deletions to the approved beneficiary list.
11. DMC meeting should 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.,
12. **Filing of Applications through Hortnet is mandatory for all Components.** (Stage wise procedure is give below)

a) The Horticulture Officers (Extension)/ Horticulture Extension Officers are responsible for filing of applications pertaining to their respective jurisdiction and completion of the process till acceptance stage in Hortnet.
b) It is the responsibility of the HOs concerned to verify all the details and approve the eligible applications without any wrong entries and forward to DHSO.
c) After approval by the DHSO, the webpage pertaining to the list of applicants for obtaining Administrative sanction should be sent to the District Mission Committee for approval. After DMC approval Administrative sanction proceedings should be issued to the concerned, a copy of the proceeding in Telugu should be sent to the farmer with the unit cost subsidy details etc.,
d) Soon after execution / grounding of the scheme, the real time photographs of the scheme implemented in three stages i.e., before execution, during execution & after execution should be uploaded in the Hortnet.
e) After receipt of real time photographs on the Hortnet, the webpage pertaining to the list of beneficiaries for release of eligible subsidy should be submitted to DMC for approval. After approval from DMC the beneficiaries shall be forwarded to ED Login of Hortnet for release of subsidy.

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 should 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 should be taken up in close coordination with the CRIDA/ Precision Farming Development Centre (PFDC) in the State.

4. Protected Cultivation of vegetables should 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 should be linked to certification. No separate funds will be provided for adoption of organic farming alone. Arrangements should 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 should 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 should be implemented in conjunction with Mahatma Gandhi National Rural Employment Guarantee Scheme (MNREGA) wherever feasible and should 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 should 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 should also be made for the buyback arrangements of the horticulture produce.
10. DHSO should 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 should 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.

I. Plantation Infrastructure Development

1. Production of Planting material:

i. Hi- Tech Nursery

S. No	Item	Max permissible Cost	Pattern of Assistance
i	Hi -Tech Nursery (Up to 4 Ha)	Rs.25.00 Lakhs per Ha.	100% to public sector limited to Rs.100 lakh/unit and in case of private sector, credit linked back-ended subsidy @ 40% of cost, subject to a maximum of Rs. 40 lakh/unit, for a maximum of 4 ha. as project-based activity on prorata basis. Each nursery will produce a minimum of 50,000 numbers per hectare of mandated perennial fruit crops/ tree spices/ aromatic trees/plantation crops per year, duly certified for its quality.

Hi-tech nurseries will have an area between 1 to 4 ha with a capacity to produce 50,000 plants per ha of mandated perennial fruit crops / tree spices / aromatic trees / plantation crops per year. The plants produced will be duly certified for their quality. The proposal of Hi-tech Nursery should include the following:

1	Proper fencing.
2	Scion / Mother block of improved varieties.
3	Root stock block (Rhizome bank in case of bamboo).
4	Net house
5	Irrigation facilities
6	Hi-tech green house having insect proof netting on sides and fogging and misting systems.
7	Hardening/maintenance in insect proof net house with light screening properties and sprinkler irrigation system.
8	Pump house to provide sufficient irrigation to the plants and water storage tank to meet at least 2 days requirement.
9	Soil solarization - steam sterilization system with boilers

Terms & Conditions:

1. The beneficiary/Institution shall enclose the water & soil analysis report from the approved lab.
2. The proposals along with DPR (including all necessary components), all relevant documents and the DMC approval shall be sent to the head office in order to place before SLEC and after obtaining approval the administrative sanction orders shall be issued.

3. The standard quality plant material to be produced i.e., Minimum of 50,000 nos per Ha of mandated perennial fruit crops/tree spices /aromatic trees/plantation crops per year duly certified for its quality.
4. The Hi-Tech Nursery should be completed within a period of one year from receipt of the Administrative sanction orders otherwise sanction orders will deemed to be cancelled and concerned District officers shall be held personally responsible.
5. The beneficiary/institution should follow the rules and regulations of nursery act 2017, Telangana State.
6. The concerned District officers shall send release proposals along with DMC approval, Photographs, Bills/ Vouchers/ Receipts for the work done in the nursery for release of funds from Head office.
7. The assistance will be released in **two installments** after physical verification of the progress work by concerned District officers and technical experts of the district.
8. Accreditation of the nursery is mandatory. The 2nd installment subsidy will be released only after submission of proposal for NHB for accreditation.
9. The concerned District officers are requested to furnish monthly progress on implementation of the unit as per terms and conditions.
10. The DHSO should report any misuse /discrepancy immediately.

2.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 will be provided for creating infrastructure like drying platforms, storage bins, packaging unit and related equipment's.

S.No	Item	Max permissible Cost	Pattern of Assistance
1	Seed infrastructure in private sector	Rs.200.00 lakhs/project	100% Unit cost amount to public sector and in case of private sector, credit linked back ended subsidy @ 50% of cost project.

- 100% of cost to public sector and in case of private sector, credit linked back subsidy @ 50% of cost of project i.e., Rs. 100.00 lakhs.
- All proposed Seed Infrastructure Units should have latest machinery i.e., semi-automatic machines/automatic machinery to minimize manual handling.
- Machinery space & storage space may be kept in view in Seed Infrastructure projects.
- The Capacity of the unit should be 4 MTs per hour.

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 on company name (Xerox copy).
12	Electricity approval

13	KYC documents of all the partners
14	GST Registration Certificate.
15	Land conversion. (for one acre only)
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 Seed Infrastructure Unit & whether the seeds are Open Pollinated/Hybrid/ Breeder/F1/F2 & 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 (self-declaration on Rs.100 Bond paper)

- The beneficiary has to establish the proposed infrastructure with total cost of Rs.200.00 lakhs as per the Government of India operational guidelines of MIDH.
- The beneficiary has to process only vegetable crops.
- The beneficiaries shall apply to DHSO s 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 should enclose the **bank consent** for release of loan amount for establishment of Seed infrastructure Unit under credit linked back-ended subsidy.
- After inspection of the site by the concerned H.O. and DHSO, the proposals with the recommendations should be placed before the District Mission Committee (DMC) for sanction of the proposals for Establishment of Seed infrastructure Unit.
- After consideration by the DMC approval, the same should 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 will be placed before the State Level Executive Committee for sanction of the proposals.

- ❖ After approval by the SLEC meeting administrative sanction orders will be communicated to the beneficiary / District Officer concerned and to the lending Bank.
- ❖ **The payment of back-ended subsidy will be made in 2 installments. First installment will 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 will be released by SHM after receiving satisfactory JIT report for project completion and commencement of commercial production.** The Joint Inspection Team will 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 should scrupulously follow the terms & conditions communicated in the administrative sanction proceedings & release proceedings.

Terms & Conditions:

1. The project should have clear cut backward linkages.
2. The promoter should ensure that, Seed Processing Unit/ project should be as per technical standards stipulated by the Department.
3. The project should be implemented within a period of one year from the date of administrative sanction.
4. The farmer/entrepreneur should 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 will 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 will be made in 2 installments. First installment will 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 will be released by SHMs after receiving satisfactory JIT report for project completion and commencement of commercial production. The Joint

Inspection Team will 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 will initiate recovery proceedings under RR Act, if there is any deviation to this condition.
10. Tending Bank would 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 will 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 would be disbursed as loan by the banks. The repayment schedule will 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 will be kept in the subsidy reserve fund A/c – borrower – wise in the books of the concerned financing bank. No interest will be applied on subsidy portion by the bank. The balance lying to the credit of the subsidy reserve fund A/c will not form part of demand and time liabilities for the purpose of SLR/CRR. Instructions issued by the RBI from time to time should be followed.
13. The concerned banker should 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 should 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 would 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 should 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.

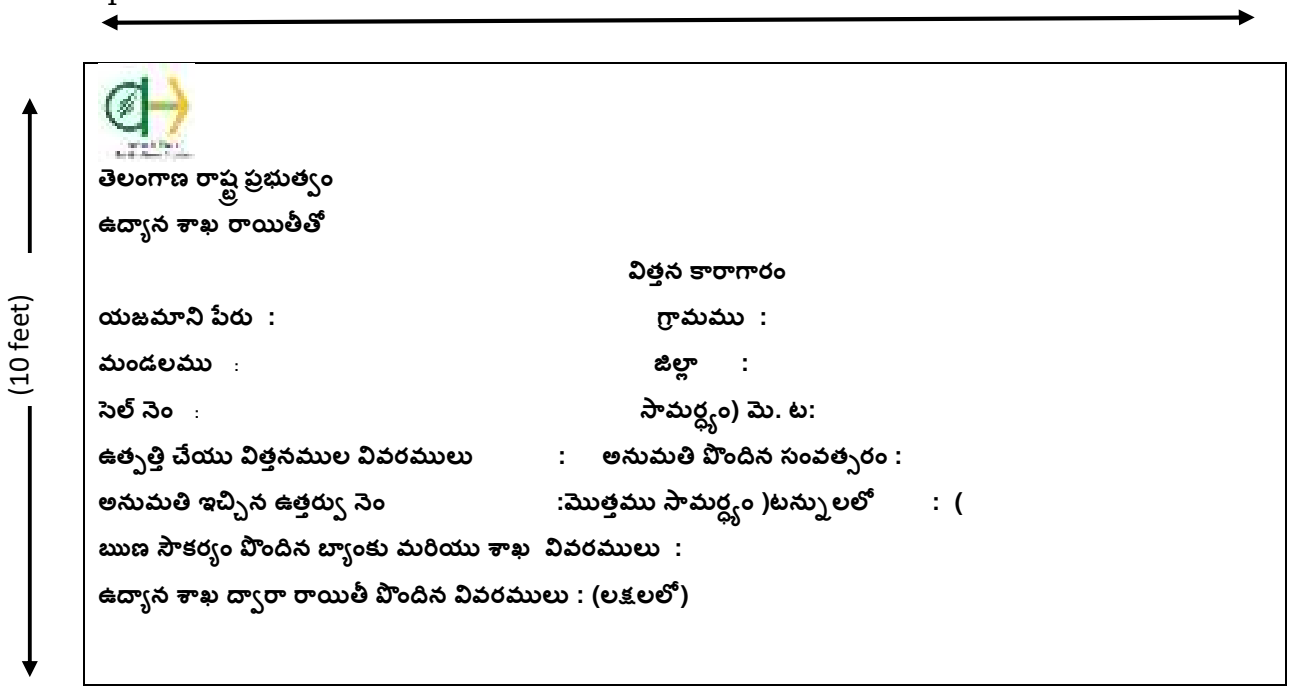
21. The promoter has to submit Affidavit to that effect i.e., the unit is utilized for the purpose for which it is meant and in case any kind of misuse or irregularities are observed in due course of period, the Director of Horticulture has right to recover the subsidy released. It came to notice (during 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 will be filed against the culprit and the entire subsidy will 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 should be kept on the compound/ walls of the unit. The Logo of Mission for Integrated

(25 feet)

Development of Horticulture and the matter mentioned below should be depicted on the board.



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

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**

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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 @ 50% 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** (i) Name of the project (ii) Address for communication with telephone No.	: : : :	
C	**Project Location with Address** (i). Survey No (ii). Village (iii). Mandal	: : : :	
D	Constitution	:	Individual/Partnership Firm/ Company.
E	Proposed Activity	:	
F	Name of the Promoter	:	
G	**Present physical status of the project:** I. Construction started or not (i) Land development status/boundary/road (ii) Connecting road to the plot (iii) Stage of Seed infrastructure Unit building civil/pre-engineered as on inspection date (iv) Type of seeds to be Processed	 : : : : :	

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)

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

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.

II. Establishment of New Gardens (Area Expansion for Fruits)

Objective:

- ✓ To bring additional areas under identified Fruit crops (Perennial) with improved varieties / hybrids.

Pattern of Assistance:

- ➢ The assistance is 40% of admissible unit cost as per MIDH norms and shall be provided for 3 years at 60 : 20 : 20 ratio for 1st, 2nd & 3rd years respectively.
- ➢ A beneficiary can avail maximum assistance upto 4 Ha.

Non-negotiable under the component of Area Expansion

1. District Horticulture Mission should ensure that Area Expansion (Perennial fruits) programme to be implemented on cluster approach in a contiguous area, instead of doing it in scattered & unplanned manner.
2. Minimum area per each block should 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 should be cautious while selecting the beneficiaries.
5. H.E.O./Horticulture Officers of the concerned area should obtain applications from identified beneficiaries along with photograph of self and without plantation in the existing format prescribed.
6. The farmers who are having assured source of irrigation and power supply are only to be selected & Micro irrigation should be integrated for better survival of plantations.
7. The farmers can apply in person or register online directly through Hortnet .
8. Land holding of the farmers should be certified by Horticulture Officers on the basis of the original Pattadar pass book or Adangal signed by MRO or computer pahani obtained from Mee Seva.
9. The HO concerned should 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.

10. 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.
11. HO & HEO should inspect 100% fields identified under his jurisdiction before sanction of the scheme and he himself should satisfy on soil suitability and availability of water and authorized power connection before recommending. Whereas, DHSO should inspect a minimum of 50% of the identified or sanctioned fields.
12. Integration of Area expansion with micro irrigation is mandatory.
13. Selection, documentation and Hortnet registration process should be completed in a time bound manner.
14. Before permitting the beneficiaries to start land preparation, pitting etc., the DHSO should ensure to take approval of DMC for the selected beneficiaries.
15. DHSO should ensure proper documentation and registration in Hortnet of various stages of implementation (viz., land preparation / pitting, planting & installation of micro irrigation system etc. along with necessary photographs) by the HOs concerned.
16. Intercropping shall be encouraged in all perennial orchards with region specific intercrop as they contribute to soil fertility and income during gestation period.
17. After the completion of plantation, H.E.O/HO concerned should inspect the fields and collect all the required bills / invoices / vouchers from the concerned farmers and upload in the Hortnet after proper scrutiny.
18. All such uploaded bills should be forwarded to the DHSO login. In turn the DHSO will compile all the bills in his login and obtain financial approval of DMC. After approval of DMC the same may be forwarded to ED login for release of payment.
19. The District officers shall send the beneficiary list along with DMC approval to the Head office for release of Subsidy.
20. The assistance will be provided to the beneficiaries / agency / firm after filing of all mandatory details in HORTNET.

A. Supply of Plant Material:

1. DHSO/DHM should make advance arrangement for procurement of planting material from accredited nurseries/certified planting material/certified seeds for ensuing season. DHSO/DHM should 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 should 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 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 HORTNET.

B. Inputs like Vermi compost, FYM, Irrigation, Inter crop, Labour Charges & implements like Gardens tools etc.,

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 given to the farmers in the form of cash through online transfer into farmers Accounts after certifying by the concerned HOs, only filing and DMC approval.

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

Pattern of Assistance

i. MANGO (5M x 5M), Himayat, Dasheri, Kesar & other improved varieties No. of Plants per Ha. 400

Sl. No	Name of Sub-component	Total Cost (in Rs.)	Year wise Assistance per Ha.			Eligible Subsidy (in Rs.) per Ha.
			1st year (2019-20)	2nd Year (2020-21)	3rd year (2021-22)	
1	**Plant Material (@Rs30/- per plant)**	**16200**	**4800**	**1200**	**480**	**6480**
2	**Inputs**					
i	FYM	10000	800	500	500	1800
ii	Neem Cake / Vermicompost	9000	400	400	500	1300
iii	Inorganic fertilizers and Micro Nutrients	32931	2140	900	1240	4280
iv	PP Chemicals/ Bio pesticides	12450	1700	280	560	2540
v	Implements (Secateurs, Spade, Pick axe)	1000	0	0	0	0
Total of Inputs		**65381**	**5040**	**2080**	**2800**	**9920**
Total (Plant Material + Inputs)		**81581**	**9840**	**3280**	**3280**	**16400**

Remarks : The Total cost (Plant Material + Inputs) is restricted to 41,000/- as per the norms of NHM and the subsidy is 40% of the restricted amount.

INPUT PACKAGE FOR MANGO (5M x 5M) PER ACRE.

Spacing: 5m X 5m			**No. of plants per Acre: 160**			
Sl. No	**Inputs**	**Unit**	**Pkg. size**	**1st year**	**2nd year**	**3rd year**
I	**Organic Manures**					
	Farm Yard Manure	Tones		3.2	1.6	3.2
	Vermicompost / Neem Cake	Kgs	40 Kg	160	240	320
II	**Inorganic Fertilizers**					
	S.S.P.	Kgs	50 Kg	320	200	300
	Urea	Kgs	50 Kg	35	70	105
	M.O.P.	Kgs	50 Kg	27	54	80
III	**Bio-Fertilisers**					
	PSB	Kg	500 grms	4	4	4
IV	**Micronutrients**					
	Zn, Mg, Boron & others as per soil testing report	Kgs	Kg	1.2	1.6	2
V	**Plant Protection Chemicals**					
	Chloropyriphos 20% EC	Ltrs	500 ml	1	1.5	2
	Dimethoate	Ltrs	500 ml	1	1.5	2
	C.O.C. 50% WP	Kgs	500 gr	1	1	1

ii. GUAVA (3M X 3M) No. of Plants per Ha. 1111

Sl. No	Name of Sub-component	Total Cost (in Rs.)	Year wise Assistance per Ha.			Eligible Subsidy
			1st year (2019-20)	2nd Year (2020-21)	3rd year (2021-22)	(in Rs.) per Ha.
1	**Plant Material (@Rs30/- per plant)**	**45000**	**13332**	**3336**	**1332**	**18000**
2	**Inputs**					
i	FYM	10000	800	500	800	2100
ii	Neem Cake / Vermicompost	12375	800	800	1200	2800
iii	Inorganic fertilizers and Micro Nutrients	47310	1918	730	1534	4182
iv	PP Chemicals/ Bio pesticides	20175	750	500	1000	2250
v	Implements (Secateurs, Spade, Pick axe)	1000	0	0	0	0
	Total of Inputs	**90860**	**4268**	**2530**	**4534**	**11332**
	Total (Plant Material + Inputs)	**135860**	**17600**	**5866**	**5866**	**29332**

Remarks : The Total cost (Plant Material + Inputs) is restricted to 73327/- as per the norms of NHM and the subsidy is 40% of the restricted amount.

INPUT PACKAGE FOR GUAVA (3m x 3m) PER ACRE.						
Spacing: 5m X 5m			**No. of plants per Acre: 444**			
Sl. No	**Inputs**	**Unit**	**Pkg. size**	**1st year**	**2nd year**	**3rd year**
I	**Organic Manures**					
	Farm Yard Manure	Tones		3.2	1.6	3.2
	Vermicompost / Neem Cake	Kgs	40 Kg	220	330	440
II	**Inorganic Fertilizers**					
	S.S.P.	Kgs	50 Kg	222	222	333
	Urea	Kgs	50 Kg	96.5	193	289.5
	M.O.P.	Kgs	50 Kg	75	150	225
III	**Bio-Fertilisers**					
	PSB	Kg	500 grms	4	4	4
IV	**Micronutrients**					
	Zn, Mg, Boron & others as per soil testing report	Kgs	Kg	1.2	1.6	2
V	**Plant Protection Chemicals**					
	Chloropyriphos 20% EC	Ltrs	500 ml	1	1.5	2
	Dichlorvas 76%EC	Ltrs	500 ml	1	1.5	2
	C.O.C. 50% WP	Kgs	500 gr	1	2	3

iii. POMEGRANATE (5 M X 3 M): No. of Plants per Ha. 667

Sl. No	Name of Sub-component	Total Cost (in Rs.)	Year wise Assistance per Ha.			Eligible Subsidy (in Rs.) per Ha.
			1st year (2019-20)	2nd Year (2020-21)	3rd year (2021-22)	
1	**Plant Material (@Rs25/- per plant)**	**22525**	**6670**	**1670**	**670**	**9010**
2	**Inputs**					
i	FYM	10000	1200	900	900	3000
ii	Neem Cake / Vermicompost	13000	1200	1000	1000	3200
iii	Inorganic fertilizers and Micro Nutrients	40784	4500	1000	1500	7000
iv	PP Chemicals/ Bio pesticides	37100	2434	764	1264	4462
v	Implements (Secateurs, Spade, Pick axe)	1000	0	0	0	0
	Total of Inputs	**101884**	**9334**	**3664**	**4664**	**17662**
	Total (Plant Material + Inputs)	**124409**	**16004**	**5334**	**5334**	**26672**

Remarks : The Total cost (Plant Material + Inputs) is restricted to 66,680/- as per the norms of NHM and the subsidy is 40% of the restricted amount i.e., Rs. 66,680/-.

INPUT PACKAGE FOR POMEGRANATE (5m x 3m) PER ACRE.						
Spacing: 5m X 5m			**No. of plants per Acre: 267**			
Sl. No	**Inputs**	**Unit**	**Pkg. size**	**1st year**	**2nd year**	**3rd year**
I	**Organic Manures**					
	Farm Yard Manure	Tones		3.2	1.6	3.2
	Vermicompost / Neem Cake	Kgs	40 Kg	260	390	390
II	**Inorganic Fertilizers**					
	S.S.P.	Kgs	50 Kg	167	417	417
	Urea	Kgs	50 Kg	55	160	160
	M.O.P.	Kgs	50 Kg	67	67	67
III	**Bio-Fertilisers**					
	PSB	Kg	500 grms	2	2	2
IV	**Micronutrients**					
	Zn, Mg, Boron & others as per soil testing report	Kgs	Kg	2	3	3
V	**Plant Protection Chemicals**					
	Chloropyriphos 20% EC	Ltrs	500 ml	1	1.5	1.5
	Dichlorvas 76%EC	Ltrs	500 ml	1	1.5	1.5
	C.O.C. 50% WP	Kgs	500 gr	2	3	3
	Streptocyclin	grms	6gr	200	400	400

iv. CITRUS/SWEET ORANGE / KINNOW / MANDARIN

Spacing: 6M X 6M **No. of Plants per Ha. 278**

Sl. No	Name of Sub-component	Total Cost (in Rs.)	Year wise Assistance per Ha.			Eligible Subsidy (in Rs.) per Ha.
			1st year (2019-20)	2nd Year (2020-21)	3rd year (2021-22)	
1	**Plant Material (@Rs25/- per plant)**	**13125**	**3892**	**966**	**392**	**5250**
2	**Inputs**					
i	FYM	10000	1000	500	500	2000
ii	Neem Cake / Vermicompost	6225	700	400	500	1600
iii	Inorganic fertilizers and Micro Nutrients	23584	2500	800	1100	4400
iv	PP Chemicals/ Bio pesticides	18961	1509	534	708	2751
v	Implements (Secateurs, Spade, Pick axe)	1000	0	0	0	0
	Total of Inputs	**59770**	**5709**	**2234**	**2808**	**10751**
	Total (Plant Material + Inputs)	**72895**	**9601**	**3200**	**3200**	**16001**

Remarks : The Total cost (Plant Material + Inputs) is restricted to 40,008/- as per the norms of NHM and the subsidy is 40% of the restricted amount.

INPUT PACKAGE FOR SWEET ORANGE (6m x 6m) PER ACRE.						
Spacing: 5m X 5m			**No. of plants per Acre: 111**			
Sl. No	**Inputs**	**Unit**	**Pkg. size**	**1st year**	**2nd year**	**3rd year**
I	**Organic Manures**					
	Farm Yard Manure	Tones		3.2	1.6	3.2
	Vermicompost / Neem Cake	Kgs	40 Kg	111	165	222
II	**Inorganic Fertilizers**					
	S.S.P.	Kgs	50 Kg	220	87	104
	Urea	Kgs	50 Kg	48	72	96
	M.O.P.	Kgs	50 Kg	22	31	40
III	**Bio-Fertilisers**					
	PSB	Kg	500 grms	2	2	2
IV	**Micronutrients**					
	Zn, Mg, Boron & others as per soil testing report	Kgs	Kg	2	3	3
V	**Plant Protection Chemicals**					
	Chloropyriphos 20% EC	Ltrs	500 ml	1	1.5	1.5
	Profenophos	Ltrs	500 ml	1	1.5	1.5
	C.O.C. 50% WP	Kgs	500 gr	1	1.5	2
	Streptocyclin	grms	6gr	36	54	72

v. ACID LIME

Spacing: 6M X 6M **No. of Plants per Ha. 278**

Sl. No	Name of Sub-component	Total Cost (in Rs.)	Year wise Assistance per Ha.			Eligible Subsidy
			1st year (2019-20)	2nd Year (2020-21)	3rd year (2021-22)	(in Rs.) per Ha.
1	**Plant Material (@Rs25/- per plant)**	**13125**	**3892**	**966**	**392**	**5250**
2	**Inputs**					
i	FYM	10000	1000	500	500	2000
ii	Neem Cake / Vermicompost	6225	700	400	500	1600
iii	Inorganic fertilizers and Micro Nutrients	23584	2500	800	1100	4400
iv	PP Chemicals/ Bio pesticides	18961	1509	534	708	2751
v	Implements (Secateurs, Spade, Pick axe)	1000	0	0	0	0
	Total of Inputs	**59770**	**5709**	**2234**	**2808**	**10751**
	Total (Plant Material + Inputs)	**72895**	**9601**	**3200**	**3200**	**16001**

Remarks : The Total cost (Plant Material + Inputs) is restricted to 40008/- as per the norms of NHM and the subsidy is 40% of the restricted amount.

INPUT PACKAGE FOR ACIDLIME (6m x 6m) PER ACRE.						
Spacing: 5m X 5m			**No. of plants per Acre: 111**			
Sl. No	**Inputs**	**Unit**	**Pkg. size**	**1st year**	**2nd year**	**3rd year**
I	**Organic Manures**					
	Farm Yard Manure	Tones		3.2	1.6	3.2
	Vermicompost / Neem Cake	Kgs	40 Kg	111	165	222
II	**Inorganic Fertilizers**					
	S.S.P.	Kgs	50 Kg	220	87	104
	Urea	Kgs	50 Kg	48	72	96
	M.O.P.	Kgs	50 Kg	22	31	40
III	**Bio-Fertilisers**					
	PSB	Kg	500 grms	2	2	2
IV	**Micronutrients**					
	Zn, Mg, Boron & others as per soil testing report	Kgs	Kg	2	3	3
V	**Plant Protection Chemicals**					
	Chloropyriphos 20% EC	Ltrs	500 ml	1	1.5	1.5
	Profenophos	Ltrs	500 ml	1	1.5	1.5
	C.O.C. 50% WP	Kgs	500 gr	1	1.5	2
	Streptocyclin	grms	6gr	36	54	72

vi. CUSTARD APPLE

Spacing: 2.5 M X 2.5 M **No. of Plants per Ha. 1600**

Sl. No	Name of Sub-component	Total Cost (in Rs.)	Year wise Assistance per Ha.			Eligible Subsidy (in Rs.) per Ha.
			1st year (2019-20)	2nd Year (2020-21)	3rd year (2021-22)	
1	**Plant Material (@Rs25/- per plant)**	**62000**	**16000**	**4000**	**1600**	**21600**
2	**Inputs**					
i	FYM	22500	1200	1000	1000	3200
ii	Neem Cake / Vermicompost	24000	1300	1000	1000	3300
iii	Inorganic fertilizers and Micro Nutrients	69637	4500	1500	3500	9500
iv	PP Chemicals/ Bio pesticides	22100	2440	980	1380	4800
v	Implements (Secateurs, Spade, Pick axe)	1000	0	0	0	0
	Total of Inputs	**139237**	**9440**	**4480**	**6880**	**20800**
	Total (Plant Material + Inputs)	**201237**	**25440**	**8480**	**8480**	**42400**

Remarks : The Total cost (Plant Material + Inputs) is restricted to 106000/- as per the norms of NHM and the subsidy is 40% of the restricted amount.

INPUT PACKAGE FOR CUSTARD APPLE (2.5m x 2.5m) PER ACRE.						
Spacing: 2.5m x 2.5m			**No. of plants per Acre: 640**			
Sl. No	**Inputs**	**Unit**	**Pkg. size**	**1st year**	**2nd year**	**3rd year**
I	**Organic Manures**					
	Farm Yard Manure	Tones		6	6	6
	Vermicompost / Neem Cake	Kgs	40 Kg	640	640	640
II	**Inorganic Fertilizers**					
	S.S.P.	Kgs	50 Kg	500	500	500
	Urea	Kgs	50 Kg	350	350	350
	M.O.P.	Kgs	50 Kg	160	160	160
III	**Bio-Fertilisers**					
	PSB	Kg	500 grms	2	2	2
IV	**Micronutrients**					
	Zn, Mg, Boron & others as per soil testing report	Kgs	Kg	2	3	3
V	**Plant Protection Chemicals**					
	Chloropyriphos 20% EC	Ltrs	500 ml	1	1.5	1.5
	Dichlorvas 76%EC	Ltrs	500 ml	1	1.5	1.5
	C.O.C. 50% WP	Kgs	500 gr	2	3	3

vii. FIG PLANTATION

Spacing: 2.5 M X 2.5 M **No. of Plants per Ha. 1600**

Sl. No	Name of Sub-component	Total Cost (in Rs.)	Year wise Assistance per Ha.			Eligible Subsidy (in Rs.) per Ha.
			1st year (2019-20)	2nd Year (2020-21)	3rd year (2021-22)	
1	**Plant Material (@Rs22/- per plant)**	**47520**	**14080**	**3520**	**1480**	**19080**
2	**Inputs**					
i	FYM	22500	1000	700	1000	2700
ii	Neem Cake / Vermicompost	24000	1000	700	1000	2700
iii	Inorganic fertilizers and Micro Nutrients	46314	2400	1000	2320	5720
iv	PP Chemicals/ Bio pesticides	22100	1440	720	840	3000
v	Implements (Secateurs, Spade, Pick axe)	1000	0	0	0	0
	Total of Inputs	**115914**	**5840**	**3120**	**5160**	**14120**
	Total (Plant Material + Inputs)	**163434**	**19920**	**6640**	**6640**	**33200**

Remarks : The Total cost (Plant Material + Inputs) is restricted to 83000/- as per the norms of NHM and the subsidy is 40% of the restricted amount.

INPUT PACKAGE FOR FIG (2.5m x 2.5m) PER ACRE.						
Spacing: 2.5m x 2.5m			**No. of plants per Acre: 640**			
Sl. No	**Inputs**	**Unit**	**Pkg. size**	**1st year**	**2nd year**	**3rd year**
I	**Organic Manures**					
	Farm Yard Manure	Tones		6	6	6
	Vermicompost / Neem Cake	Kgs	40 Kg	640	640	640
II	**Inorganic Fertilizers**					
	S.S.P.	Kgs	50 Kg	320	256	384
	Urea	Kgs	50 Kg	64	128	192
	M.O.P.	Kgs	50 Kg	64	128	192
III	**Bio-Fertilisers**					
	PSB	Kg	500 grms	2	2	2
IV	**Micronutrients**					
	Zn, Mg, Boron & others as per soil testing report	Kgs	Kg	2	3	3
V	**Plant Protection Chemicals**					
	Chloropyriphos 20% EC	Ltrs	500 ml	1	1.5	1.5
	Dichlorvas 76%EC	Ltrs	500 ml	1	1.5	1.5
	C.O.C. 50% WP	Kgs	500 gr	2	3	3

All District officers should 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 ED login of HORTNET for which release is now requested				Area achieved and entered in ED login of HORTNET for which release is now requested (Ha.)				Amount To be Released as per entry in ED login of HORTNET and DMC approval (Rs.)				Remarks
				PHY (Ha)	FIN (Rs. in Lakhs)	Gen	SCP	TSP	Total	Gen	SCP	TSP	Total	Gen	SCP	TSP	Total	
1																		
2																		

Area Expansion - Vegetables

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	**Vegetables (For SC & ST farmers only)**		
	i) Hybrid	Rs.50,000/ ha	40% of the cost.

The pattern of assistance & guidelines for establishment of **Vegetable Crop Colonies** (Tomato, Brinjal, Chillies & Cucurbits) are as mentioned below:

1. TOMATO, BRINJAL SEEDLINGS

Under SC & ST categories **Subsidy Maximum 1 Ha. / beneficiary**

S. No	Component	Total permissible cost per Acre (in Rs.)	Subsidy per Acre @ 40%	Farmer contribution	subsidy & non subsidy to whom to be released
1	Seedlings @ 1.00 rupee per Seedlings (8000 seedlings required per 1 acre) (Rs. 1.00 rupee x 8000=8000) inclusive of packings	**8000**	**6500**	**1500**	1. Non-subsidy an amount of Rs. 1500/- per acre shall be paid in favour of ADH-COE, Jeedimetla / ADH-COE, Mulugu in the form of Demand Draft and the same should be submit to the ADH-COE, Jeedimetla / ADH-COE, Mulugu at the time of lifting seedlings under intimation to the Head Office. 2. Subsidy an amount of Rs.6500/- shall be released to the ADH-COE, Jeedimetla / ADH-COE, Mulugu for supplying of Seedlings by the Head Office. 3. Subsidy an amount of Rs.1000/- shall be released to the Farmers accounts towards inputs after submission of the bills for an amount of Rs.6500/- per Acre by the Head Office. 4. The transportation charges of Rs. 500/- per Acre shall be released to the concerned DHSOs by the Head Office. 5. Available interest funds may be utilized towards meeting transportation charges by the DHSOs for time being and same shall be reimbursement to DHSOs on submission of bills and incorporating in HORTNET.
2	Transportation charges	500	500	0	
3	Labour charges	5000	0	5000	
4	Inputs (Fertilizers & Pesticides)	6500	1000	5500	
	TOTAL	**20000**	**8000**	**12000**	

2. CHILLIES/CAPSICUM SEEDLINGS

Under SC & ST categories **Subsidy Maximum 1 Ha. / beneficiary**

S. No	Component	Total permissible cost per Acre (in Rs.)	Subsidy per Acre @ 40%	Farmer contribution @ 0.20 paise per seedling	subsidy to whom to be released
1	Seedlings @ 1.25 rupee per Seedlings (Rs. 1.25 rupee x 6400 = 8000)	8000	6720	1280	1. Non-subsidy an amount of Rs. 1280/- per acre shall be paid in favour of ADH-COE, Jeedimetla / ADH-COE, Mulugu in the form of Demand Draft and the same should be submit to the ADH-COE, Jeedimetla / ADH-COE, Mulugu at the time of lifting seedlings under intimation to the Head Office. 2. Subsidy an amount of Rs.6720/- shall be released to the ADH-COE, Jeedimetla / ADH-COE, Mulugu for supplying of Seedlings by the Head Office. 3. Subsidy an amount of Rs.780/- shall be released to the Farmers accounts towards inputs after submission of the bills for an amount of Rs.6000/- per Acre by the Head Office. 4. The transportation charges of Rs. 500/- per Acre shall be released to the concerned DHSOs 5. Available interest funds may be utilized towards meeting transportation charges by the DHSOs for time being and same shall be reimbursement to DHSOs on submission of bills and incorporating in HORTNET
2	Transportation charges	500	500	0	
3	Labour charges	5500	0	5500	
4	Inputs (Fertilizers & Pesticides)	6000	780	5220	
	TOTAL	**20000**	**8000**	**12000**	

3. CUCURBITS / BITTER GOURD SEEDLINGS

Under SC & ST categories **Subsidy Maximum 1 Ha. / beneficiary**

S. No	Component	Total permissible cost per Acre (in Rs.)	Subsidy per Acre @ 40%	Farmer contribution	subsidy to whom to be released
1	Seedlings @ 3.55 rupees Total No of Seedlings 2500 per Acre (3.55x2500= 8875)	8875	7500	1375	1.Non-subsidy an amount of Rs. 1375/- per acre shall be paid in favour of ADH-COE, Jeedimetla / ADH-COE, Mulugu , in the form of Demand Draft and the same should be submit to the ADH-COE, Jeedimetla / ADH-COE, Mulugu at the time of lifting seedlings under intimation to the Head Office. 2. Subsidy an amount of Rs.7500/- shall be released to the ADH-COE, Jeedimetla / ADH-COE, Mulugu for supplying of Seedlings by the Head Office. 3. The transportation charges of Rs. 500/-
2	Transportation charges	500	500	0	
3	Labour charges	2500	0	2500	

4	Inputs (Fertilizers & Pesticides)	8125	0	8125	per Acre shall be released to the concerned DHSOs 4. Available interest funds may be utilized towards meeting transportation charges by the DHSOs for time being and same shall be reimbursement to DHSOs on submission of bills and incorporating in HORTNET
	TOTAL	**20000**	**8000**	**12000**	

- **Only SCP/TSP farmers are eligible**.
- Subsidy will be given to maximum 1 ha per beneficiary
- The DHSOs should identify the farmers nearby surrounding the District Head Quarters.
- This activity should be taken up in cluster approach. Each cluster should be not less than 10 ha. keeping in view of market potentiality.
- In case of below 1 Ha farmers the subsidy will be admissible on prorate basis.
- The non-subsidy portion towards seedlings cost shall to be paid in the form of DD, drawn in favor of "ADH-COE, Jeedimetla / ADH-COE, Mulugu".
- Transportation charges shall be reimbursed to DHSOs on submission of bills and incorporating in HORTNET.
- The farmer shall submit the necessary bills/vouchers towards Inputs for arranging of subsidy to the farmers accounts through DBT.
- The subsidy portion for seed component will be released to ADH-COE, Jeedimetla / ADH-COE, Mulugu.
- 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.
- The clusters are to be provided with infrastructure facility like Pre cooling unit, refer vans, collection grading centers, vending vans etc., under MIDH / RKVY and tied up with market group of farmers registered and their produces are to be supplied to Rythu Bazars / housing colonies.
- The inputs (INM / IPM) required for the cultivation are to be supplied as per the recommended doses given by the local scientists of Horticulture University.
- The DHSOs are not permitted to inter change the budget allocation among the sub components and should claim the subsidy as per the indicators given for each component.

- The cost involved in components like preparation of land, planting, staking, labour cost and intercultural operations should be borne by the beneficiary.
- The identified beneficiaries should be uploaded in the HORTNET.
- The CLHSO is responsible for proper inspection, certification of invoice, and obtaining digital photograph of farmers along with material supplied on subsidy in their Jurisdiction.
- Priority should be given to woman farmers and SHG groups.
- The CLHSO should record the data on production / productivity after adoption of latest technology in cluster by farmers.
- Micro irrigation is to be tied up with TSMIP wherever feasible for getting better yields.
- 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 Hortnet.

All District officers should 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 ED login of HORTNET for which release is now requested				Area achieved and entered in ED login of HORTNET for which release is now requested (Ha.)				Amount To be Released as per entry in ED login of HORTNET 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	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 were uploaded in the HORTNET with field photos of 3 stages. The 3 stages photos should be clubbed and uploaded to HORTNET as field photo (Pit digging, during Plantation and after Plantation along with beneficiaries)	
12	Current Status of implementation of Scheme.	

HEO **HO** **DHSO**

III. 2nd year & 3rd year maintenance

A. 2nd Year maintenance of plantations established during 2018-19

- **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 **75%** of the survival garden under 2nd year maintenance.

PATTERN OF ASSISTANCE Per Ha. TO BE FOLLOWED FOR 2nd YEAR MAINTENANCE PROGRAMME (GARDENS ESTABLISHED DURING 2018-19)

Sl.No	Name of the Crop	Assistance (in Rs. per Ha.) - II Year (2018-19)		
		Plant Material	Inputs	Total Assistance
1	Mango (5m x 5m)(Himayat, Dasheri, Kesar)	1200	2080	3280
2	Guava (3m x 3m)	3336	2530	5866
3	Apple Ber (5m x 5m)	1600	1200	2800
4	Pomegranate (5m x 3m)	1670	3664	5334
5	Citrus (Sweet orange/Kinnow/ Mandarin) (6m x 6m)	966	2234	3200
6	Acid lime (6m x 6m)	966	2234	3200
7	Custard apple (2.5 x 2.5m)	4000	4480	8480
8	Fig (2.5 X 2.5m)	3520	3120	6640

B. 3rd Year maintenance of plantations established during 2017-18

- **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 2017-18)

Sl. No	Name of the Crop	Assistance (in Rs. per Ha.) - **III Year (2017-18)**		
		Plant Material	Inputs	Total Assistance
1	Mango (5m x 5m)	400	2880	3280
2	Guava (3m x 3m)	888	4978	5866
3	Apple Ber (5x5 M)	640	2160	2800
4	Pomegranate (5m x 3m)	670	4664	5334
5	Citrus (Sweet orange/Kinnow/ Mandarin) (6m x 6m)	0	3200	3200
6	Acid lime (6m x 6m)	0	3200	3200

- ✓ While calculating the total cost as per the package, the subsidy amount indicated for each sub-component under IPM / INM should be strictly followed and no diversification of funds from one input to another is allowed i.e., from Bio pesticide to chemical pesticide/organic manures to inorganic fertilizers etc.
- ✓ Before extending input assistance to the beneficiaries under 2nd and 3rd year maintenance, DMC should 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 identified beneficiaries should be uploaded in the HORTNET.
- ✓ 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 will release the Subsidy to the farmers account directly through online.
- ✓ 100% inspections by HO is mandatory. Whereas, DHSOs should inspect a minimum of 50% of beneficiaries fields.

All District officers should 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 ED login of HORTNET for which release is now requested				Area achieved and entered in ED login of HORTNET for which release is now requested (Ha.)				Amount To be Released as per entry in ED login of HORTNET and DMC approval (Rs.)			
				PHY (Ha)	FIN (Rs.in Lakhs)	Gen	SCP	TSP	Total	Gen	SCP	TSP	Total	Gen	SCP	TSP	Total
1																	
2																	

IV. 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.

Pattern of Assistance:

Sl. No	Item	Cost Norms	Pattern of Assistance
1	Community tanks/on farm ponds/on farm water reservoirs with use of plastic/ RCC lining	Rs. 20.00 lakhs for 100m x 100m x 03m	100% of cost to irrigate 10 ha of command area, with pond size of 100m x 100m x 03m or any other smaller size on prorata basis depending upon the command area either use of minimum 500-micron plastic films or RCC lining, owned & managed by a community/ farmer group.
2	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 will be admissible on pro rata basis depending upon the command area. Maintenance will be ensured by the beneficiary

- **Community farm Ponds:** Under the Mission, assistance will be provided for creating water sources through construction of community tanks, farm ponds/reservoirs with plastic / RCC lining to ensure lifesaving irrigation to horticulture crops. This will be in conjunction with MNREGS and wherever possible adequate convergence has to be ensured. In such case assistance under MIDH will be limited to cost of plastic / RCC lining. Lining material should conform to BIS standards. However, where MGNREGS assistance is not available, 100% assistance, including the cost of plastic / RCC lining will be provided. Maintenance of the water

source will be the responsibility of the community. These water bodies should be linked with Micro Irrigation facility for judicious use of water.

- **Individual Farm Ponds:** Assistance would also be provided for creating water source through construction of farm ponds for individuals. For smaller size of the ponds, cost will be admissible on pro rata basis depending upon the command area. This will also be in conjunction with MGNREGS. However, for non MGNREGS beneficiaries, assistance @ 50% of cost will be provided including the cost of plastic / RCC lining. Lining material should conform to BIS standards. Maintenance of the asset will 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
2	Community	100	66.66	66.66

- The ponds should be provided 1.5 :1 slope.
- The DHSO/ Ho should ensure that the command area is proportionate to the size/ volume of community farm pond proposed.
- The DHSO/HO should 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:

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

- The quantity of required Geo-membrane sheet may be worked out by the following formulae:

Bottom width + 2 X Side slope length + 2 X side anchoring

- The storage capacity of farm pond may be worked out by

(Volume of the farm pond X 1000) liters

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 must be sealed or compacted unless the site is dug into a tight, clay formation so that film could be saved from puncture caused by these projections.
- After compaction, the whole area of pond should be treated with 4% atrazine (Weedicide solution) so that the plastic film could be saved from puncture caused by root infestation.
- After that all surface of pond should 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 (generally 100 plus). 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 0.5 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: 15351 / IS: 10889 /IS:2508)
- 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 like 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 should be taken to avoid the wrinkles and film must 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 for the year 2019-20:

1. Farmers are to be sensitized and motivated by CLHSOs/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. Beneficiaries are to be identified in Grama sabhas and list has to be approved in Grama sabha.
3. Preference shall be given to small and marginal farmers. SC and ST ratios shall be followed scrupulously.
4. **A silt trap should be provided at the entrance of the pond.**
5. **The sheet should not be folded while laying.**
6. **The Geo Membrance sheet with 500 microns is more effiective rather than 300 microns.**
7. The District Officer should collect the non-subsidy portion towards Geo-membrane in the form of Demand draft in favour of District Officer from the concerned farmer in case the farmer selected empanelled firm in such cases the subsidy will be released to concerned firm.
8. District Officer should obtain DMC approval for the list of feasible beneficiaries identified for farm ponds.
9. After obtaining DMC approval, the DHSO shall issue work order to the empanelled Agency / farmer.
10. **The farmers are given choice to choose firms either from empanelled/non empanelled to procure/purchase of Geo-membrane sheet but, the sheet should be as per specifications i.e., BIS-10889:2004/BIS-15351:2015 etc., for 300 Microns/500 Microns and the same specification of the sheet laid in farm pond should be depicted & clearly visible in the photographs which is uploaded in HORTNET.**
11. **The subsidy will only be released after fixing the fencing and name board at Farm Pond.**
12. MI Engineer will take the MB record and Check measurement will Be done by Horticulture Officer.
13. **Super check by DHSOs (50% in case of Individual farm ponds & 100% in case of Community farm ponds of Target randomly).**
14. After completion of execution of farm pond MI Engineer and concerned

Horticulture office will issue the completion certificate along with photograph for record purpose at district level to the DHSO

15. DHSO will inspect the farm pond along with concerned HO and inspection report along with the DMC approval will be sent to the SHM Office by recommending for release of subsidy to the beneficiary.
16. The DHSO shall send the original bills, photographs and a copy of DMC approval to the Head Office for release of subsidy to the beneficiary through online. They should send atleast **03 photographs** for each farm pond. **Fencing, display board and BIS/ISI mark should be depicted in photographs**.
17. All the farm ponds should be integrated with Micro irrigation. Under such conditions installation of sand filter is mandatory.
18. **Fencing & Erection of display board are mandatory.**
19. The fencing should be done by the farmer with his own cost.
20. A Display board (Iron) of size 2'x2' ft containing the following information in Telugu should be placed near the farm pond.

Department of Horticulture

Mission for Integrated development of Horticulture (MIDH)

Name of farmer:

Extent of land & crop:

Type of Farm Pond: Individual / Community

Size of pond :

Capacity of pond (litres):

Total expenditure: Rs.

Subsidy amount: Rs.

Non subsidy amount: Rs.

Year of sanction:

Format -1

JOINT INSPECTION REPORT FOR COMMUNITY FARM PONDS						
Village:			**Mandal:**			
Name of the Beneficiary (along with Community members)	**Dimensions of the farm pond (m)**		**Volume of the Pond**	**Actual command area (Ha)**	**Total Expen diture in Rs.**	**Recommended subsidy as per MIDH Norms @ Rs.66.66 per cubic meter (in Rs.)**
1.	Top (length X width)					
2.	Bottom (length X width)					
3.	At Ground level (length X width)					
4.	Depth					

Certificate:

This is to certify that,

1. The farmers/community members have constructed community farm pond of mentioned dimensions & volume. The command area of the community farm pond is in conformity with the MIDH norms.
2. The necessary documentation PPB, Aadhar card/ any other identification proof, Bank Passbook, passport size and field photos, etc., of each community members were attached to the application.
3. The farmers/community members have used BIS/ISI standard lining sheet for lining of the farm ponds.
4. The farmers/community members have arranged fencing around the pond and also erected display board.
5. Recommended for release of subsidy of Rs.----------/- towards construction of community farm pond as per MIDH norms.

MLHSO/HEO **CLHSO/HO** **DHSO**

Format -2

JOINT INSPECTION REPORT FOR INDIVIDUAL FARM PONDS

Name of the Beneficiary, Village & Mandal & Survey No	Dimensions of the farm pond (m)		Volume of the Pond	Actual command area (Ha)	Total Expen diture in Rs.	Recommended subsidy as per MIDH Norms @ Rs.62.5 per cubic meter (in Rs.)
	Top (length X width)					
	Bottom (length X width)					
	At Ground level (length X width)					
	Depth					

Certificate:

This is to certify that,

1. The farmer has constructed individual farm pond of mentioned dimensions & volume.
2. The farmer has used BIS/ISI standard lining sheet for lining of the farm ponds.
3. The farmer has arranged fencing around the pond and also erected display board.
4. Recommended for release of subsidy of Rs.----------/- towards construction of individual farm pond as per MIDH norms.

MLHSO/HEO **CLHSO/HO** **DHSO**

V. PROTECTED CULTIVATION (PRECISION FARMING)

Pattern of Assistance:

S. No	Item	Max permissible Cost	Pattern of Assistance
1	Naturally Ventilated Poly house	Rs.844 per sqm (>2080sqm to 4000sqm)	50% of the unit cost i.e., Rs.422.00 per sqm. Maximum eligibility is 4000 sqm per beneficiary
2	Plastic Mulching	Rs. 32,000/ha	50% of the total cost limited to 2 ha per beneficiary.

1. 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 & fruit 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 should be shaded on the north and the west to protect from winds.

- The site should be free from shadow.
- The site should 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 should be in the range of 5.5 to 7.0 and EC between 0.1 to 0.3mS/cm.
- pH of soil should be in the range of 5.5 to 6.5 and EC between 0.5 to 0.7mS/cm.
- Structure should 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 will apply to concerned DHSO office through HO of concerned block with complete required documents as per check-list.
4. DHSO will scrutinize the applications and shall submit to Head office along with DMC approval for placing before SLEC.
5. Head office will issue administrative sanction letter after approval from SLEC.
6. In case of finance by Bank, the DHSO will verify the documents. If found as per check-list, will 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 will 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 will be considered based on available targets.
8. All the cases must be entered through online on HORTNET in case assistance is to be availed under MIDH scheme.
9. The programme for protected cultivation should 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. Only farmer can be a beneficiary under the schemes. The document viz. Ration card/voter card/Aadhar card/Domicile/Passport etc., contact mobile no. are required.
3. Farmer means a person having land ownership in one's name. For this he has to submit Land Records: Original Pattadar Pass book/ Computer pahani (Latest by three months) Land verification report by Patwari and VRO. All the documents submitted shall not be more than three months old.
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 farmers of Telangana State can take land on lease. But in all such cases the cluster projects should be bankable. The combined amount of assistance to such cluster projects should 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 **Training:** Minimum three days training-cum-workshop regarding awareness on Protected Cultivation, issues related to Cultivation, Construction and Maintenance of Poly houses is required.

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

V. Terms & Conditions:-

- The estimated project details designed by the technical consultant as per technical standards of MIDH should be attached to the application.
- Soil and water analysis reports from reputed labs are also to be enclosed to the proposal.
- Protected Cultivation of vegetables should 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 should be as per technical specifications of MIDH. The Company/ firm must be a registered 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 State (Assisted Green House with logo of MIDH).

- **The payment of subsidy will be made in 2 installments. First installment will 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 will be released by SHM after receiving satisfactory JIT report for project completion and commencement of commercial production.**
- **The Joint Inspection Team will 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 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 Poly Houses, flowers, vegetables, medicinal and aromatic plants, spices etc. should 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 should clearly depict the board, unit, farmer and also committee members of joint inspection team.

VI. DMC approval has to be obtained and list of beneficiaries should be submitted to the state MIDH cell for approval of State Level Executive Committee.

VII. Administrative sanction proceedings will be issued by the state MIDH Cell after SLEC approval duly informing the conditions along with the design, specifications, date of completion etc.

VIII. 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 will 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 should inspect the site at least on monthly basis and should guide the farmer in all aspects like maintenance of poly house, production practices, marketing status etc.,

IX. 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.

X. Marketing: The Marketing of produce of Polyhouse is the responsibility of farmer.

Financial Assistance by MIDH/Department of Horticulture

TELANGANA STATE

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>2080-4000 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><td>Area (m^2)</td><td>Plane land (m)</td><td>Hilly area (m)</td></tr>
<tr><td>2080 to 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 should 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 should 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</td></tr>
</table>

Items	Description / specifications
	washers without welding. (33 mm bracing to increase the strength and to with stand vertical and horizontal pressures.)
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 2nd purline.
Purline member and other	43 mm,2mm thickness
Horizontal bracings	42mm OD with 2mm thickness horizontal bracing 2 No's must provide each bay in both sides.
Cross Bracing	Every 3rd column top to 2nd column bottomof both sides must 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. (or) GI Pipes of minimum 60 mm OD & 3mm thickness (@4.20 kg/m)
Fasteners	All nuts and bolts must 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
	Zig zag spring high carbon steel with spring

Items	Description / specifications
Spring insert	action wire, galvanized of 2-3 mm diameter must 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 should be provided as curtains on all sides having manual operated crank mechanism. 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). iii)50% Mono x Mono shade net of 125 GSM, should be fixed at side ventilators below the curtains. Rollup side GI pipes with uniform thickness throughout the side 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 should 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 will 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 should 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	
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 will be binding to the firm.

General Conditions of Erection

1. 22 tons of material (steel) should be used for 1Acre area.
2. No pipes should be found welded. The bottom horizontal of 8 m length should be prepared by placing one feet section of lesser size. (in side & clamping it properly).
3. The apron plastic must be buried in the ground at least 50 cm from ground level.
4. The curtain pipe should 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. should 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 should 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 will 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 should be fixed with profile and spring in the center of gutter length.
9. Self-drilling screw in profile should 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 should be tensioned tightly enough so that there should not be flapping during windy days.
13. The structural design should 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 will use BIS mark material. The system should run smoothly and there shall be no leakage.
16. Department will arrange the water source, electricity and booster pump to operate the MI system.
17. The overall structure should 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. (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 Soil PH & EC, Irrigation water PH & EC Soil & Water Analysis reports to be enclosed. (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 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 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/Original Computer pahani
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 Hortnet	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 Hortnet	DHSO
17	Release of subsidy to the beneficiary through online transfer (Hortnet)	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 Hortnet 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 will 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 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", 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: 2019

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 STATE

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 STATE

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. 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**

2. 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 should wet the Soil before ploughing the mulching sheet after completion of the cropping.
- Burning of mulching sheet should be avoided and it should be disposed for recycling.

Thickness of Film:

In plastic mulching, the thickness of mulch film should be in accordance with type & age of crops. Economics suggest that the film thickness should 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 should preferably be equivalent to the canopy of the plant (larger the canopy, larger the area of mulching and vice versa).

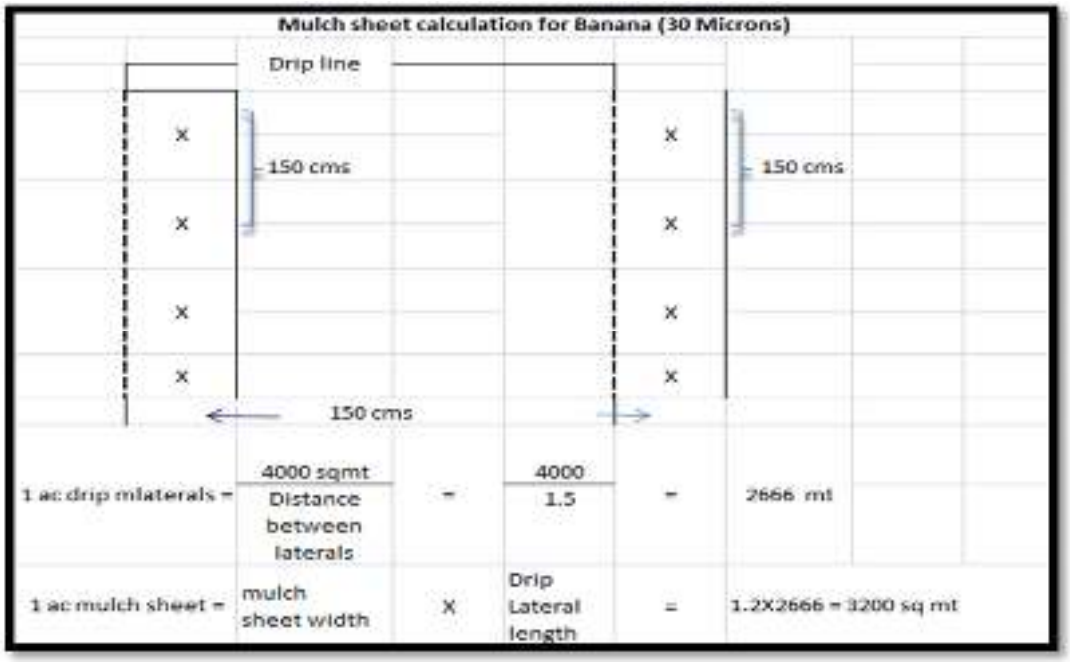
Calculation of Mulch Film Requirement (Approximately):

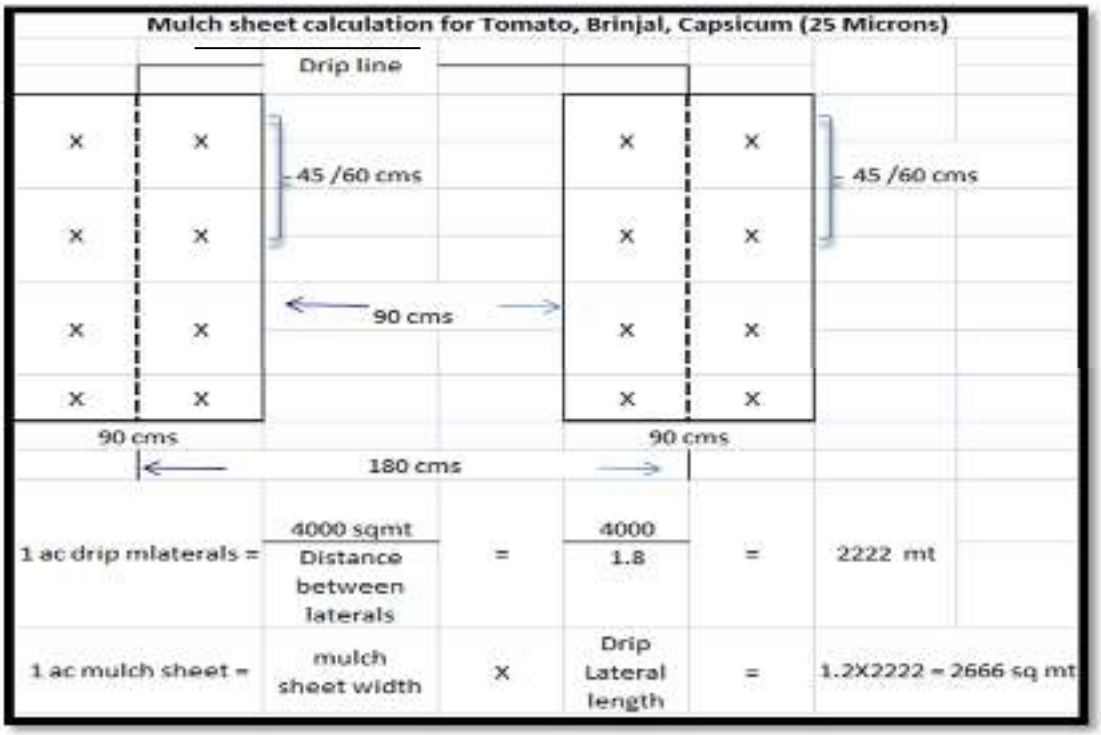
Thickness			Area coverage (m2/kg)	Weight (Gram/m2)
Micron	Gauge	mm		
7	28	0.007	144	6.9
20	80	0.02	54	18.4
25	100	0.25	42	23
40	160	0.04	26	38
50	200	0.05	21	46
100	400	0.10	11	93

Indicative Cost of Plastic Mulching:

On the basis of 80% coverage of area under the film, indicative cost of mulching for Horticulture crops would be approximately Rs. 32,000/- per ha.

Examples for calculation of requirement of Mulch Sheet :





Terms & Conditions:

1. **Farmers will be given choice to procure the mulching sheet of their own choice by incurring full cost mulching material. After verification of the vouchers and Physical verification in the field, the assistance will be online transferred to the farmers account as per the eligibility and cost norms.**
2. Farmers once availed subsidy under this component is not eligible for the 2nd time.
3. **The subsidy is 50% of the permissible unit cost (limited to Rs. 16,000 / ha) with maximum limit of 2 Ha / Beneficiary.**
4. The subsidy should be calculated on the basis of extent of surface covered under plastic mulch of respective crop.
5. The selected beneficiaries should be given training programme on concept of Mulching, benefits of mulching, selection of mulch sheet, quantity required and gauge of mulch sheet.
6. Only Horticulture crops are eligible for assistance.
7. DMC approval to be obtained for identified beneficiaries and for final release of assistance.
8. The scheme shall be implemented for promoting intensive cultivation of vegetables in a cluster mode to **SC & ST farmers**.
9. Documentation with photographs should be done after laying out of mulch sheet.

10. Application registration in Hortnet should be done by the concerned HO.
11. Uploading the bills and field photos in Hortnet should 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 HORTNET	
6	DMC approval for sanction & release of funds	
7	Feedback of the farmers	
8	Inspection report of Concerned Horticulture Officer	

Inspection Report

Date of Inspection:

1. Name of the Farmer: 2. Father Name:
3. District: 4. Mandal:
5. Village: 6. Survey No:
7. Crop: 8. Total Extent (Ha):
9. Extent (Ha.) applied for Mulching:
10. Extent (Ha.) for which Admin Sanction issued:
11. Extent (Ha.) for which mulching done:
12. Actual Expenditure (Rs.) :
13. Recommended Subsidy (Rs.) :
14. Detailed remarks of Horticulture Officer:

HEO HO

VI. PROMOTION OF IPM/INM

1. PLANT HEALTH CLINIC (Public Sector)

Pattern of Assistance:

Sl. No.	Component	Unit cost	Pattern of Assistance
1	Plant Health Clinic	Rs. 25.00 lakhs per unit	100% to public sector

VII. HORTICULTURE MECHANISATION

Objective:

- Increasing the reach of farm mechanization to small and marginal farmers and to the regions where availability of farm power is low.
- Creating hubs for hi-tech & high value farm equipment.
- Provide financial assistance to farmers for procurement of farm machinery and implements.

S. No	Particulars	Name of the Equipment	Total Cost Rs in Lakh	Pattern of assistance	Maximum Subsidy
1	Tractors	up to 20 PTO HP	3.00 lakh per unit	25% of the cost subject to a maximum of Rs.0.75 lakh/unit for general category farmers and in the case if SC, ST Small & Marginal farmers, Women farmers 35% of the cost subject of a maximum of Rs.1.00 lakh/unit. (whichever is less in both cases)	Gen – Rs.75,000/- per Unit & SC/ST/W/ SF/MF- Rs. 1.00 Lakh/ Unit
2	**Tractor/Power tiller (below 20 BHP) driven equipments)**				
i	Sowing, planting, reaping and digging equipments	Brush Cutters	Rs.0.30 lakh/unit	40 % of the Cost, Subject to a maximum of Rs. 0.12 lakh/unit for general category farmers and 50% of the Cost in case of SC, ST, Small and marginal farmers, women farmers, subject to max. of Rs.0.15 lakh per unit (whichever is less in both cases)	Gen – Rs.12,000/- per Unit & SC/ST/W/ SF/MF- Rs. 15,000/- per Unit
ii	Self-propelled Horticulture Machinery	Power saws for pruning & Rejuvenation	Rs.2.50 lakh /unit	40 % of the Cost, Subject to a maximum of Rs. 1.00 lakh/unit for general category farmers and 50% of the Cost in case of SC, ST, Small and marginal farmers, women farmers, subject to max. of Rs.1.25 lakh per unit (whichever is less in both cases)	Gen – Rs.1.00 lakh per Unit & SC/ST/W/ SF/MF- Rs. 1.25 Lakh per Unit
3	**PP equipment**	Tractor mounted / operated sprayer (above 35 BHP) / Electrostatic sprayer	Rs. 1.26 lakh/unit	40% of the Cost, subject to a maximum of Rs.0.50 lakh/unit for general category farmers, and 50% of the cost in the case if SC, ST, Small & Marginal farmers, women farmers, subject of a maximum of Rs. 0.63 lakh/unit (whichever is less in both cases)	Gen – Rs.50,000/- per Unit & SC/ST/W/ SF/MF- Rs. 63,000/- per Unit

Note:

The assistance for above machinery is <u>percentage of assistance indicated against the respective machinery vis-à-vis the category</u> or <u>maximum subsidy allowed</u>, whichever is less in both cases.

All the DHSOs/ HOs are directed to give wide publicity of Farm Mechanization & PP equipment under MIDH programme.

1. The farmers having orchards are only eligible for the component of Horticulture Mechanization. The identified beneficiaries should be uploaded in the HORTNET.
2. The application should be collected by the concerned HO and the DHSO will scrutinize it.
3. The DHSO/ HO should ensure that, the beneficiary has not claimed subsidy for the same unit under any other schemes (including Agriculture Department).
4. The empanelled firms approved by M/s. TSAIDC, Hyderabad are only eligible to supply farm machinery. The empanelled companies should be registered in HORTNET with their bank account details through concerned DHSOs.
5. The empanelled companies who get their equipment tested either from FMTTI (Farm Machinery Training and Testing Institute) Geraldine A.P. or Designated Institute from DAC are only eligible for subsidy.
6. All the companies / Authorized Dealers should furnish bank account numbers along with the IFSC codes to concerned DHSOs for online transfer of amounts of non-subsidy amount through RTGS only.
7. The empanelled companies list along with the prices should be made available to the farmers. The choice of the farmer in selection of the firms should be given priority.
8. After the selection of the firm and its make, the concerned HO/ DHSO should explain the details of subsidy and non-subsidy particulars to the identified beneficiaries, who are enrolled in the scheme.
9. The identified farmers should pay the non-subsidy amount in shape of DD drawn in favour of concerned DHSO.
10. The concerned DHSO shall take DMC approval for selected beneficiaries and will issue a purchase order along with the non-subsidy amount to the approved firm / authorized dealer (empanelled through TSAIDC, Hyderabad) with a copy marked to concerned farmer.
11. **Issue of purchase order without non-subsidy amount cannot be entertained.**
12. The firm should deliver the desired make of the machinery to the farmer.
13. The original invoices / bills and purchase order of the concerned firms / authorized dealer empanelled through Agros will be retained at concerned DHSO office only.

14. The DHSOs will send final proceeding along with annexure approved by District Collector to the Head Office for effecting the payment to the concerned firms / authorized dealer empanelled through Agros.
15. During disbursement of the machinery to the farmer, concerned HO, DHSO and concerned firm representative / authorized dealer should take a digital photo along with the machinery and the same is to be uploaded in HORTNET.
16. The subsidy amounts will be released to the approved firms / authorized through online transfer by the Head office.
17. The District officers should strictly follow the SC/ST allocations while implementing scheme.
18. The District Officers should see that the entire physical & financial targets are to be achieved as per time line, duly following the norms & guidelines without any deviation.

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

RELEASE - ANNEXURE																				
S.No	Name of equipment	Unit	Assistance (in Lakh)	Target Allotted		No. of beneficiaries entered in ED login of HORTNET for which release is now requested					No of Units achieved and entered in ED login of HORTNET for which release is now requested (Ha/No.)					Amount To be Released as per entry in ED login of HORTNET and DMC approval (Rs.)				
				PHY (Ha)	FIN (Rs.in Lakhs)	Gen	SF/MF	SCP	TSP	Total	Gen	SF/MF	SCP	TSP	Total	Gen	SF/MF	SCP	TSP	Total

Checklist for Inspection

S.No.	Criteria	Remarks
	HORTICULTURE MECHANIZATION	
1	Farm implement was of the firm empanelled by TS AGROS	
2	Unique Identification Code embossed on the implement	
3	Original Bills / invoices and purchase order of the concerned firm/ authorized dealer	
4	DMC approval was obtained	
5	The beneficiary details have been uploaded in the HORTNET	

VIII. 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) will be leveraged to the extent possible. MIDH would 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 will 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, will 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 should 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 should 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 should 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 should be duly signed by the DHSO for onward submission to State cell.
    3) If any documents are missing the promoter should 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 should 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 should verify these documents with originals and DHSO should attest the duplicate copies before submitting the project proposals to this office.

3) 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 should 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.

4) 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 should be properly filled and subsidy has to be recommended for release.

5) MONITORING

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

6) 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 hortnet	Within 7 days after getting application form with full details
5.	Obtaining DMC approval	
6.	Forwarding to State cell	Within 2 days after obtaining DMC approval
7.	Techno Economic Viability Study by the Technical consultant	Within 15 days
8.	After obtaining Techno Economic Viability Report – Project to be placed in SLEC.	
	After the project is approved in SLEC of State cell & MIDH and Administrative sanction order shall be issued.	
9.	Periodical inspection by DHSO	Monthly intervals
	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)	
10.	DHSO to recommend for constitution of joint inspection	Within a week after completion of civil works & machinery installation.
11.	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.
12.	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	
13.	DHSO to recommend for constitution of joint inspection	Within a week after commercial commencement of the project
14.	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.
15.	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 Houses	Rs.4.00 lakhs	50% of the total cost i.e., maximum Rs. 2.00 Lakhs
2	Integrated pack house with facilities for conveyer belt, sorting, grading units, washing, drying and weighing.	Rs. 50.00 lakh per unit with size of 9Mx18M	Credit linked back-ended subsidy @ 35% of the cost of project in general areas for individual entrepreneurs
3	Cold Rooms (staging) with add on technology of solar energy	Rs. 15.00 lakhs per unit	35% of the project cost i.e., maximum Rs. 5.25 lakh/unit. As per MIDH GOI norms.
4	Cold Rooms (staging)	Rs. 15.00 lakhs per unit (30 MTs)	35% of the total cost i.e., maximum Rs.5.25 lakh/unit
5	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.
6	Cold storage units Type 1 - basic mezzanine structure with large chamber (of >250 MT) type with single temperature zone	Rs. 8,000/MT, (max 5,000 MT capacity)	Credit linked back-ended subsidy @ 35% of the cost of project in general areas for individual entrepreneurs.
7	Pre-Cooling Unit (6 MTs)	Rs. 25.00 Lakhs	Credit linked back-ended subsidy @ 35% of the cost of project for individual entrepreneurs.
8	Primary/ Mobile/ Minimal Processing unit		
i	Turmeric Boilers	Rs.4.50 lakhs	Credit linked back-ended subsidy @ 40% of the capital cost of project in general areas. The maximum subsidy is Rs. 1.80 lakh per unit or 40% of the Unit cost, whichever is less
ii	Turmeric Polishing Drums	Rs.1.675 lakhs	Credit linked back-ended subsidy @ 40% of the capital cost of project in general areas. The maximum subsidy is Rs. 0.67 lakh per unit or 40% of the Unit cost, whichever is less
NOTE	The release of back ended subsidy need not be credit linked for the institutions like Public sector units, Panchayats, Cooperatives, Registered Societies/ Trusts and Public limited companies provided they can meet the remaining share of the project cost, out of their own resources.		

STEPS TO BE FOLLOWED (PROJECT WISE):

Cold storages / Ripening chambers

- The project proposals should 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 will be made in 2 installments. First installment will 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 will be released by SHMs after receiving satisfactory JIT report for project completion and commencement of commercial production.
- The Joint Inspection Team will comprise of DHSO, HO Concerned, representative from lending bank, technical expert (TSG member), Sr. Officer from Head office and representative from 3rd party.
- The promoter / DHSO/ Banker should 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 1st 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 should 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 should have clear cut backward linkages to provide assured market to the producers.
2. The promoter should ensure that project Cold Storage/ Ripening Chamber should be as per technical standards stipulated by the Department.
3. The Banker's letter should 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 should 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 will be made in 2 installments. First installment will 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 will be released by SHMs after receiving satisfactory JIT report for project completion and commencement of commercial production. The Joint Inspection Team will comprise of members from lending bank, technical expert, SHM and District Administration.
7. The project must 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 Government agency for the same unit. The Department will initiate recovery proceedings under RR Act. If there is any deviation to this condition.
9. Tending Bank should 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 will 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 would be disbursed as loan by the banks. The repayment schedule will 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 will be kept in the subsidy reserve fund A/c – borrower – wise in the books of the concerned financing bank. No interest will be applied on subsidy portion by the bank. The balance lying to the credit of the subsidy reserve fund A/c will not form part of demand and time liabilities for the purpose of SLR/CRR. Instructions issued by the RBI from time to time should be followed.
12. The concerned banker should 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 should 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 would 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 should 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 utilised 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. 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 will be filed against the culprit and the entire subsidy will be recovered back from the Bank.
21. In case of any discrepancy/ dispute, the decision of the Mission Director & Director of Horticulture is final.

1. 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. 8,000/MT, (max 5,000 MT capacity)	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.

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, 3.4m^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 must incorporate air monitoring and ventilation mechanism for controlled air replenishment, enabling them to counter produce induced modified atmospheric parameters inside the storage chambers.

The 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)
12	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 alongwith 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

Format – IV

Preliminary (Inspection Report) while submitting project to State MIDH Cell.

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/Partnership Firm/ Company.
E	(i). Proposed Activity (ii). Type (iii). Proposed type of cooling system	: : :	Cold Storage
F	Name of the Promoter	:	
G	**<u>Present physical status of the project :</u>** I. Construction started or not (v) Land development status/boundary/road (vi) Connecting road to the plot (vii) Stage of cold store building civil/pre engineered as on inspection date (viii) Type of produce to be stored	: : : : :	

<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** (i) Name of the project (ii) Address for communication with telephone No.	: : : :	
C	**Project Location with Address** (i). Survey No (ii). Village (iii). Mandal	: : : :	
D	Constitution	: : :	Individual/Partnership Firm/ Company.
E	(i). Proposed Activity (ii). Type (iii). Proposed type of cooling system	: : :	Cold Storage
F	Name of the Promoter	:	
G	Present physical status of the project :		
H	**<u>Bank Details :</u>** 1. Bank Name 2. Branch 3. Bank Sanction Date 4. Loan Account No 5. Bank disbursement statement with A/c. No. 6. Letter from Banker (Subsidy Account no. given by bank)	: : : : : : :	

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:

Chamber – I						**Chamber – II**					
Particulars	**Length**	**Width**	**Height**	**Volume in Cubic Meters**		**Particulars**	**Length**	**Width**	**Height**	**Volume in Cubic Meters**	
A.Cellar						**A. Cellar**					
Less - Machine Room						Less - Machine Room					
Net Volume						Net Volume					
B. Ground Floor						**B. Ground Floor**					
Less Machine Room						Less Machine Room					
Less Office Space						Less Office Space					
New Volume						New Volume					
C. Floors						**C. Floors**					
Less Machine Room						Less Machine Room					
Net Volume						Net Volume					
D. Total Net Volume (A+B+C)						**D. Total Net Volume (A+B+C)**					
E. Total Area											
Chamber – I											
Chamber – II											
F. Capacity in terms											
Total volume / 3.4				MT		**Maximum allowed (MT)**	5000				
Total Cost of the Project				Lakh							
Cost per MT						**Maximum allowed (Rs.)**	8000				
Total Eligible Subsidy (35% of cost)						**35% of (Capacity X per MT)**					

If the capacity is less than 5000 MT actual cost and capacity is considered for calculation.

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 - (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 (ii)Address for communication with telephone No. (iii) Project location with address (iv) Constitution (Individual/ Joint Individual/Partnership Firm/ Company.		
2.	Proposed Activity Type Proposed type of cooling system	Cold Store	
3.	Name of the Promoter		
4.	<u>Present physical status of the project</u> 4A. Date of start (i) Land development status/boundary/road (ii) Connecting road to the plot (iii) Stage of cold store building civil/pre engineered as on inspection date (iv) Installation of power transformer/electricity supply equipment (v) Installation of Refrigeration cooling system (vi) Type of produce (vii) Whether cold storage is functioning. (viii) Size of the Cold Storage (ix) No. of Chambers (x) Size of each Chamber (xi) Chamber-1 in ft (xii) Chamber-2 (xiii) Chamberr-3 (xiv) Chamber-4 (xv) Size of Machinery Room	**Remarks (in detail)** ➢ ➢ ➢ ➢ ➢	
5	Technical Details		
	Type of Compressor		
	Make /Model No./ Make		

	Serial No.		
	Motor Type 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 2. Make / Model No. 3. Type of Humidifiers	: : :	
7	Type of Doors		
A	Thickness of Insulation		
B	Insulation Material Used for the Door With Density		
8	Generator Make Model No. Capacity in KV		
9	Material Handling Lift Capacity		
10	Thickness of the Walls		
11	Type of Insulation used for walls Wall insulation Thickness/ Density Vapor Barrier used –Details		
12	Floor Insulation Type Thickness		
13	Ceiling Insulation Material used Thickness 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._____ 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.

BASIC DATA SHEET FOR COLD STORAGES

Format – VI

A. Identification

<table>
<tr><td>Name of Cold Storage</td><td colspan="3"></td></tr>
<tr><td rowspan="2">Location of Cold Storage</td><td>Area / Village</td><td colspan="2">Town</td></tr>
<tr><td>District</td><td colspan="2">State</td></tr>
<tr><td>Name of Promoter Company / Owner</td><td colspan="3"></td></tr>
<tr><td>Type of company (Proprietorship / Partnership / Pvt. Ltd / Ltd)</td><td colspan="3"></td></tr>
<tr><td rowspan="2">Postal address of Promoter</td><td colspan="3"></td></tr>
<tr><td>Tel / Fax</td><td>Mob. No</td><td>E-mail</td></tr>
<tr><td>Present activity in brief</td><td colspan="3"></td></tr>
<tr><td>Name of CEO / MD</td><td colspan="3"></td></tr>
<tr><td>Name of Manager / Contact Person</td><td colspan="2"></td><td>Phone / Mobile No</td></tr>
</table>

B. Basic Cold Store Design Considerations

i) Commodity Storage Requirements

Type of Commodities/Produce		
Ideal / Recommended Storage Conditions – Temperature (DB in ^{O}C) – Humidity RH (%) Range – Air Circulation (CMH/MT of Produce) – Ventilation (Air Changes/Day) – CO_2 Range (PPM) Produce Cooling Rate (^{O}C/day) Freezing Point ^{O}C – Others		
Cold Chamber Dry bulb (DB in ^{O}C)		
Cold Chamber RH (%)		
Max Storage period (months)		
Max product temp (^{O}C) – at the time of loading		
Daily loading rate (MT/day) – in each cold chamber		
Loading Period (months)		
Pull down rate (^{O}C / day)		
Unloading Period (months)		
Daily unloading rate (MT/day) – from each cold chamber		
Ante Room Conditions (T ^{O}C & RH %)		
Sorting & Grading Area (T ^{O}C & RH %)		
Special Provisions 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 – Type – 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 L x B x H (m)				
No. of mezzanine floors 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 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. 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**

2. 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 relative 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 AS ME /ASHRAE / 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 rip ened & stacking and air-flow system. In this context, banana may be take n as reference crop for calculation 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

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 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

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** (i) Name of the project (ii) Address for communication with telephone No.	: : : :	
C	**Project Location with Address** (i). Survey No (ii). Village (iii). Mandal	: : : :	
D	Constitution	:	Individual/Partnership Firm/Company
E	(i). Proposed Activity (ii). No of Chambers	: :	Ripening Chamber
F	Name of the Promoter	:	
G	**Present physical status of the project :** I. Construction started or not (i) Land development status/boundary/road (ii) Connecting road to the plot (iii) Stage of Ripening Chamber building civil/pre engineered as on inspection date (iv) Type of produce to be Ripened	: : :	

Certificates:

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** (i) Name of the project (ii) Address for communication with telephone No.	: : : :	
C	**Project Location with Address** (i). Survey No (ii). Village (iii). Mandal	: : : :	
D	Constitution	: : :	Individual/Partnership Firm/ Company
E	(i). Proposed Activity (ii). Type (iii). Proposed type of cooling System	: : :	Ripening Chamber
F	Name of the Promoter	:	
G	Present physical status of the project :		
H	**Bank Details :** 1. Bank Name 2. Branch 3. Bank Sanction Date 4. Loan Account No 5. Bank disbursement statement with A/c. No. 6. Letter from Banker (Subsidy Account no. given by bank)	: : : : : : :	

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

Sl. No.	Component of cost	Quantum	Unit
	c. Water spray – Air Cooled systems		Nos
8.	Humidification		
	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

BASIC DATA SHEET

Format – VI

A. Identification

<table>
<tr><td>Name of Cold Storage</td><td colspan="3"></td></tr>
<tr><td rowspan="2">Location of Cold Storage</td><td>Area / Village</td><td colspan="2">Town</td></tr>
<tr><td>District</td><td colspan="2">State</td></tr>
<tr><td>Name of Promoter Company / Owner</td><td colspan="3"></td></tr>
<tr><td>Type of company (Proprietorship / Partnership / Pvt. Ltd / Ltd)</td><td colspan="3"></td></tr>
<tr><td rowspan="2">Postal address of Promoter</td><td colspan="3"></td></tr>
<tr><td>Tel / Fax</td><td>Mob. No</td><td>E-mail</td></tr>
<tr><td>Present activity in brief</td><td colspan="3"></td></tr>
<tr><td>Name of CEO / MD</td><td colspan="3"></td></tr>
<tr><td>Name of Manager / Contact Person</td><td colspan="2"></td><td>Phone / Mobile No</td></tr>
</table>

B. Basic Cold Store Design Considerations

i) Commodity Storage Requirements

Type of Commodities/Produce		
Ideal / Recommended Storage Conditions – Temperature (DB in ^{O}C) – Humidity RH (%) Range – Air Circulation (CMH/MT of Produce) – Ventilation (Air Changes/Day) – CO_2 Range (PPM) Produce Cooling Rate (^{O}C/day) Freezing Point ^{O}C – Others		
Cold Chamber Dry bulb (DB in ^{O}C)		
Cold Chamber RH (%)		
Max Storage period (months)		
Max product temp (^{O}C) – at the time of loading		
Daily loading rate (MT/day) – in each cold chamber		
Loading Period (months)		
Pull down rate (^{O}C / day)		
Unloading Period (months)		
Daily unloading rate (MT/day) – from each cold chamber		
Ante Room Conditions (T ^{O}C & RH %)		
Sorting & Grading Area (T ^{O}C & RH %)		
Special Provisions 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 – Type – 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 L x B x H (m)				
No. of mezzanine floors 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 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	Loading Period	

Hours/Day	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. 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**

3. (i). PACK HOUSES

Pattern of Assistance:

Sl. No.	Component	Unit cost	of Assistance
1	Pack Houses / Pre-fabricated Houses	Rs.4.00 lakhs	Rs. 2.00 Lakhs

In respect of the Joint inspection, the DHSO shall organize Joint inspection of the Pack House in presence of promoter duly constituting a committee with the following members with DMC approval:

1) DHSO
2) Horticulture Officer
3) Banker (in case of credit linked back ended subsidy)

The joint inspection report should be sent in format- I & II with all necessary certifications.

The DHSOs shall take up 100% random inspection of the established Pack Houses and also shall monitor the status of pack houses sanctioned.

The DHSOs are requested to scrutiny the project proposals of pack houses at their level and maintain the proposals for record purpose in their office and need not forward to State cell. They are requested to obtain the DMC approval and send copy of DMC approval duly attesting along with details in format and forward to this office for obtaining SLEC approval at State cell.

Technical Specifications for Pack House

Requirements and Costing for a small Pack House

SI. No	Detail of structure	Specifications/Details	Qty	Units	Unit rate (Rs)	Total Cost (Rs)
A	Land	Near Metal road, near well, power pole etc	500	yds		Farmer's Own
B	Expenditure Item					
1	**Civil Structure**					
1.1	Site leveling etc and Wire fencing	Leveling land and to make it motor able inside the premises	500	yds	18	9000
1.2	30X20' Packing hall	30X20 ft with Gl/Asbestos roof, Hard cement flooring, Windows doors of country wood.	600	sft	460	275000
2	**Mechanical**					
2.1	Packing /grading Table	4'X8' of Gl or SS material, with 100mm side protection to stop roll off and with provision to drain water	1	Nos	20000	• 20000
2.2	Washing sheets	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	10000	10000
2.4	Crate Mover	To move crates of 6 nos at a time	1	Nos	2500	1500
3	Electrical					
3.1	Meter with connection	Single Phase or three phase connection including deposit	1	No	6500	6500
3.2	Electrical Wiring with fuses, switches, holders, bulbs, fans etc.		1	Set	17500	17500
3.3	Emergency lights		2	No	1000	2000
4	**Water System**					
4.1	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	Nos	12500	12500
4.2	Water piping	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

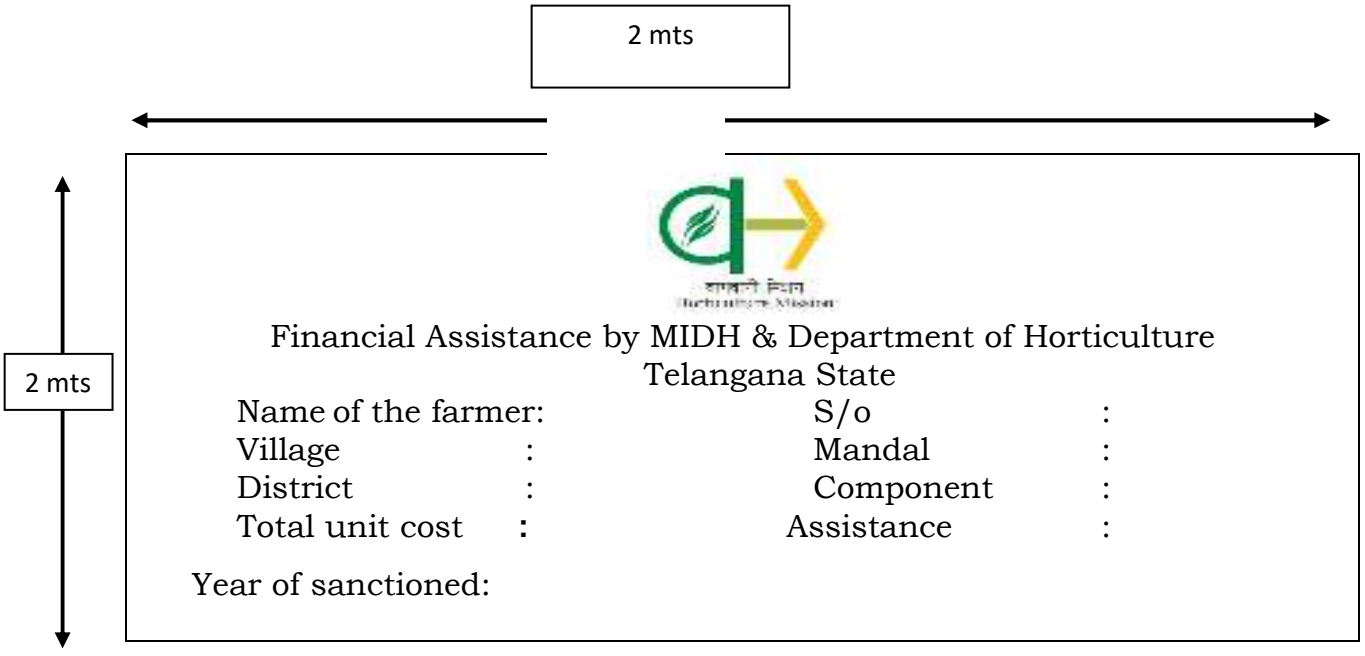
5	Other assets Small office table, three chairs, almairah, Wooden showels		1	LS	15000	15000
6	Pre-Operative, Bank processing fee, documentation expenses for loan etc., Ceiling Fans & local maintenance.		1	LS	20000	20000
						400000

NOTE:

i) Each Pack house should also be given crates under other schemes to use within pack house as a rule
ii) Second packing, grading table is preferable
iii) Inverter is preferable, as power cuts may prevail in villages
iv) If any other scheme provides for Solar lights, they should be encouraged.

TERMS AND CONDITIONS:

1. The farmer should 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:



2. The project should 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.
3. The farmers should inform the completion of the Pre Fabricated Pack house to the concerned DHSO in writing along with photograph.

4. After installation of Pre Fabricated Pack house, the committee consisting of DHSO, the concerned HO, will inspect the Pre Fabricated pack house in presence of farmer and submit the joint inspection report in the prescribed format along with the enclosures therein.
5. **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.**
6. The payment will 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.
7. Undertaking from the farmer that the Pre Fabricated Pack house will be utilized for the purpose for which it is sanctioned / as per the project i.e. for horticulture produce only.
8. The promoter shall not claim subsidy from any other Government agency for the same unit. The Department will initiate recovery proceedings under RR Act. If there is any deviation to this condition.
9. In case of any discrepancy /dispute the decision of the Mission Director & Director of Horticulture is final.

FORMAT –I

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

Name of the farmer:
District:
Place:
Date of approved in SLEC :

As per project report					As per the inspection and actual investment				
Particulars	**Specifications**	**Capacity**	**Qty.**	**Amount (Rs.)**	**Specifications**	**Capacity**	**Qty.**	**Amount (Rs.)**	**Remarks**
Pack House	30 x 20 ft. with GI/Asbestos roof, Hard cement flooring, Windows, doors of country wood/ Iron Sheet. 6 windows and 2 no. of 6 feet double door.	600 sft.	1	275000					
Weighing Machine	406 x 660mm/ 300 Kgs capacity	300 kg	1	10000					
Meter with connection, Electrical Wiring with fuses, switches, holders, bulbs, fans, emergency lights etc.	800VA. 500 Watts	5 Tube lights, 3 fans, 2 hrs backup	1	25000					
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	20000					
Plastic Tubs / Cement Tubs	5'.6" x 2'.6" x 0'.17" 1st Water tub for cleaning of fruits before chemical treatment with fresh water. 2nd water tub for fungicidal treatment. 3rd water tub for cleaning of fruits after treatment with fresh water.		3	20000					
Over Head Plastic Tank	Plastic "Sintex" or equivalent or cement based located at height either outside or with separate support. Water connection from sintex water tank to 3 water tubs with PVC pipe.	2000 lts.	1	15000					
Ceiling Fans and local made tables covered with foam and rexine				20000					
other assets	Small office table, 3nos chairs			**15000**					
Total :				**400000**					
Bank loan disbursed to the promoter (If credit linked back ended subsidy)									
Promoters margin amount									
Total :									

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 **HO** **DHSO**

Banker (If credit linked back ended subsidy)

FORMAT – II

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

Name of the farmer:

District:

Place:

Date of approved in SLEC :

As per project report					**As per the inspection and actual investment**				
Particulars	**Specifications**	**Capacity / Units**	**Qty**	**Amount (Rs.)**	**Specifications**	**Capacity**	**Qty**	**Amount (Rs.)**	**Remarks**
Pack House	30 x 20 ft. with GI/Asbestos roof, Hard cement flooring, Windows, doors of country wood/ Iron Sheet. 6 windows and 2 no. of 6 feet double door.	600 sft.	1	275000					
Meter with connection, Electrical Wiring with fuses, switches, holders, bulbs, fans, emergency lights etc.	800VA. 500 Watts	5 Tube lights, 3 fans, 2 hrs backup	1	2500					
Weighing Machine	406 X 660 mm/ 300 Kgs Capacity	300 Kg	1	10000					
Mechanical :									
Grading and working table	3' x 5' of wooden or iron or Plastic tables	No's	4	20000					
Stools for Tables	Wooden or plastic or iron stools	No's	24	8000					
Plastic Buckets	Plastic buckets each of 20 lts capacity	No's	20	3500					
Plastic tubs	Plastic tubs each of 40 lts capacity	No's	6	3000					
Secatures	Secatures – 5	No's	5	2500					
Scissors	Scissors – 12	No's	12	3000					

Over Head Plastic Tank	Plastic "Sintex" or equivalent or cement based located at height either outside or with separate support. Water connection from sintex water tank to 3 water tubs with PVC pipe.	2000 lts.	1	15000					
Ceiling Fans and local made tables covered with foam and rexine				20000					
other assets	Small office table, 3nos chairs			15000					
Total :				**400000**					
Bank loan disbursed to the promoter (If credit linked back ended subsidy)									
Promoters margin amount									
Total :									

Certificates:

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 **HO** **DHSO**

Banker (If credit linked back ended subsidy)

3 (ii). PRE-FABRICATED PACK HOUSES

Pattern of Assistance:

Sl.No	Name of the Component	Total Unit Cost	Subsidy
1	Pre- Fabricated Pack house	Rs. 4.00 lakh/unit with size of 9Mx6M	50% of the total cost i.e., Rs.2.00 lakh per Unit.

1. The installation of Pre-Fabricated Pack house should be done by the empanelled firm approved by the TS Agros for the year 2019-20.

2. Wide publicity to be given for identified locations / areas on benefits / facilities being provided by the department through local news papers, electronic media, pamphlets, display on the notice board of Z.P.Ps / M.P.Ps / Village Panchayats.

3. The farmer/applicant will submit application to the HO/ DHSO in the prescribed format.

4. Due preference shall be given to SF / MF, SCs, STs and Women as per the norms in selection process.

5. During selection care should 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 should be earmarked exclusively for women beneficiaries. No deviation is permitted.

6. **Filing of Applications through Hortnet is mandatory.**

7. The DHSOs are requested to scrutiny the project proposals of Pre-Fabricated Pack houses and send copy of DMC approval duly attesting along with details and forward to this office for obtaining **SLEC approval** at State cell for issuing of Administrative sanction.

8. Joint inspection team to be constituted for Pre- Fabricated pack houses:
   a) In respect of the Joint inspection, the DHSOs shall organize Joint inspection of the Pre- Fabricated Pack house in presence of promoter duly constituting a committee with the following members with DMC approval:

      1)DHSO
      2)Horticulture Officer
      3)Farmer

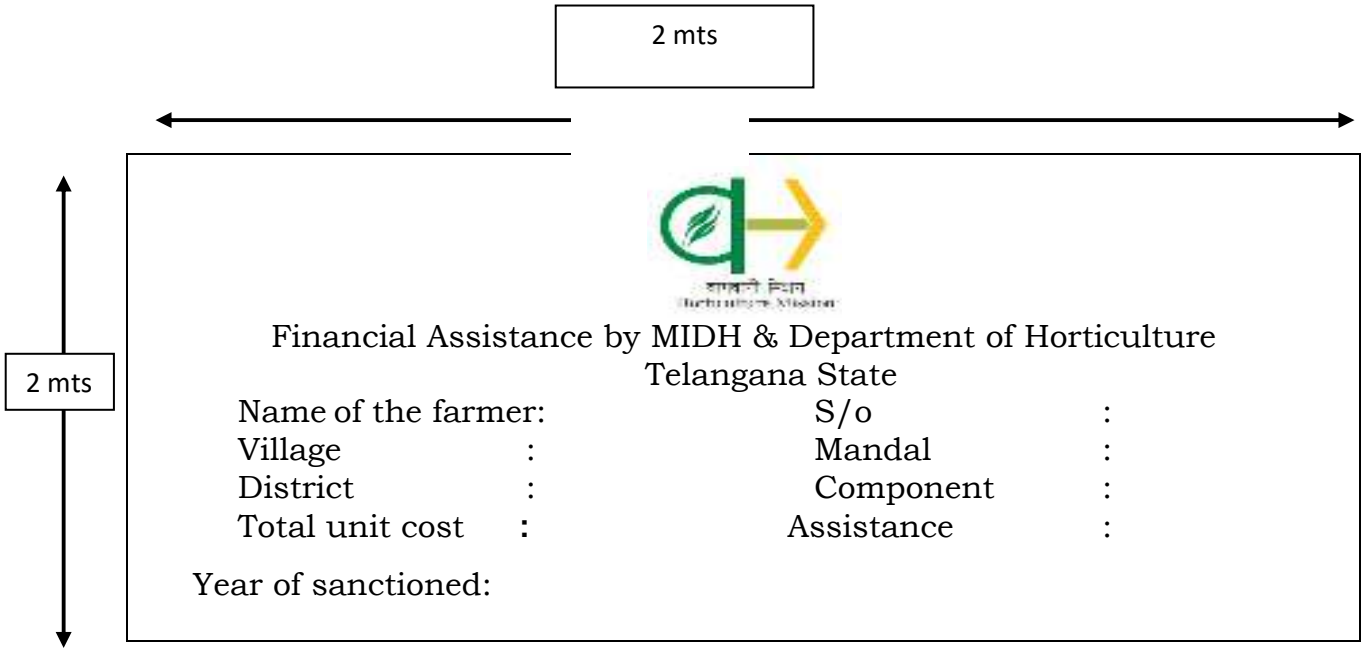
   b) The joint inspection reports should be sent in formats enclosed with all necessary certifications along with DMC approval to the Head office for release of subsidy to the beneficiaries accounts.

c) The DHSO shall take up 100% inspections of the established Pre-Fabricated Pack houses and also shall monitor the status of Pre- Fabricated pack houses sanctioned.

9. To avoid spoilage of produce in the units the temperature should be regulated. Hence, the unit should have (04) ventilators, (02) Windows & (01) Exhaust Fan.

TERMS AND CONDITIONS:

1. The installation of Pre- Fabricated Pack house should be done by the empanelled firm approved by the TS Agros for the year 2019-20.
2. The farmer should display the board and place in front of the Pre Fabricated Pack House Banners/Flexes are not to be permitted. The Logo of Mission for Integrated Development of Horticulture and the matter mentioned below:



3. The project should 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.
4. The farmers should inform the completion of the Pre Fabricated Pack house to the concerned DHSO in writing along with photograph.
5. After installation of Pre Fabricated Pack house, the committee consisting of DHSO, the concerned HO, will inspect the Pre Fabricated pack house in presence of farmer and submit the joint inspection report in the prescribed format along with the enclosures therein.

6. **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.**
7. The payment will 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.
8. Undertaking from the farmer that the Pre Fabricated Pack house will be utilized for the purpose for which it is sanctioned / as per the project i.e. for horticulture produce only.
9. The promoter shall not claim subsidy from any other Government agency for the same unit. The Department will initiate recovery proceedings under RR Act. If there is any deviation to this condition.
10. In case of any discrepancy /dispute the decision of the Mission Director & Director of Horticulture is final.
11. The farmer should construct/installation the Pre Fabricated Pack house as per the specification mentioned in Implementation guidelines for the year 2019-20.

TECHNICAL SPECIFICATIONS FOR PRE- FABRICATED PACK HOUSE (9 mts x 6 mts)

Sl. No	Name of the structure	Details	Qty	Unit	Rate in (Rs.)	Total Cost (Rs.)	To be borne by the farmer in (Rs.)	To be borne by the Firm
1	Land	Nearer to Road, Power Poles, Water sources	5000	sq.ft		Farmer's Own		
2	Flooring cost	40' x 25' ft	1000	sq.ft	77	77000	77000	
3	Site Levelling & wire fencing	Levelling to make it plain surface	1000	sq.ft	15	15000	15000	
4	Electrification charges		1	Set	35000	35000	35000	
5	Water Pipeline		1	Set	26000	26000	26000	
6	Plastic Crates		50	Nos.	350	17500	17500	
7	Weighing Machine		1	Nos.	20000	20000	20000	
8	Water Tank	1000 Lit Capacity	1	Nos.	10000	10000	10000	
9	Pre- Fabricated pack house Structure cost	9 x 6 mtrs (30' x 20' feet)	1	Set	200000	200000		200000
	Total (Rs in Lakhs)					**400500**	**200500**	**200000**

FORMAT TO CONDUCT FINAL AND JOINT INSPECTION OF PRE- PACK HOUSE (FLOWERS & ORCHARDS) BY THE COMMITTEE UNDER POST HARVEST MANAGEMENT COMPONENT OF MIDH, TELANGANA

Name of the farmer:
District:
Place: Date of approved in SLEC :

Sl. No	Name of the structure	Details	Qty	Unit	Rate in (Rs.)	Total Cost (Rs.)	Subsidy recommended by the DHSO/DLHSCO after conducting field inspection
1	Land	Nearer to Road, Power Poles, Water sources	5000	sq.ft		Farmer's Own	
2	Flooring cost	40' x 25' ft	1000	sq.ft	77	77000	
3	Site Levelling & wire fencing	Levelling to make it plain surface	1000	sq.ft	15	15000	
4	Electrification charges		1	Set	35000	35000	
5	Water Pipeline		1	Set	26000	26000	
6	Plastic Crates		50	Nos.	350	17500	
7	Weighing Machine		1	Nos.	20000	20000	
8	Water Tank	1000 Lit Capacity	1	Nos.	10000	10000	
9	Pre- Fabricated pack house Structure cost	9 x 6 mtrs (30' x 20' feet)	1	Set	200000	200000	
	Total (Rs in Lakhs)					**400500**	

Certificate:

1) This is to certify that Sri./ Smt. _____ has established Pre-Fabricated 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) The subsidy amount of Rs. _____/- may be released to the ---------- --- Firm for establishment of pre-fabricated pack house.

Promoter **HO** **DHSO**

4. INTEGRATED PACK HOUSE

PATTERN OF ASSISTANCE

Sl. No.	Component	Unit cost	Pattern of Assistance
1	Integrated pack house with facilities for conveyer belt, sorting, grading units, washing, drying and weighing.	Rs. 50.00 lakh per unit with size of 9Mx18M	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

This component refers to modern integrated pack-house with facilities for conveyer belt system for sorting & grading, washing, drying and weighing of Horticulture produce.

A modern integrated pack-house unit enables small lot sourcing of horticulture produce, and should be built close to farming area. A maximum admissible cost norm of 50 lakhs per integrated pack-house unit is applicable for each beneficiary. The actual value of the equipment will vary as per design options. The unit capacity of an integrated pack-house is considered at 16 MT per day and is considered for output from 2MT/hour sorting grading line, running for 8 hours a day. The design capacity of each project will be considered pro-rata – for example a 32 MT per day throughput will be equivalent to 2 pack-houses. The included equipment are weighing scales, mechanized facilities like conveyer belt for sorting, grading units and where applicable washing, drying units.

The component "Integrated Pack-house" includes:

1. Receiving area, covered: a covered shaded area for arriving produce to be off-loaded and undergo pre-selection and weighing.
2. Enclosed covered sorting and grading area: a food handling hall with mechanized handling and cleaning equipment.
3. Sorting and Grading conveyors: mechanized roller or belt based system to allow working personnel to selectively pick and choose produce for next activity, capable of handling 16 MT of output per day. Water based conveyor system used for some crops.

4. Washing/Drying equipment: where required, mechanized washing and drying lines.

5. Packaging area: designated area where produce is manually packaged into market lots.

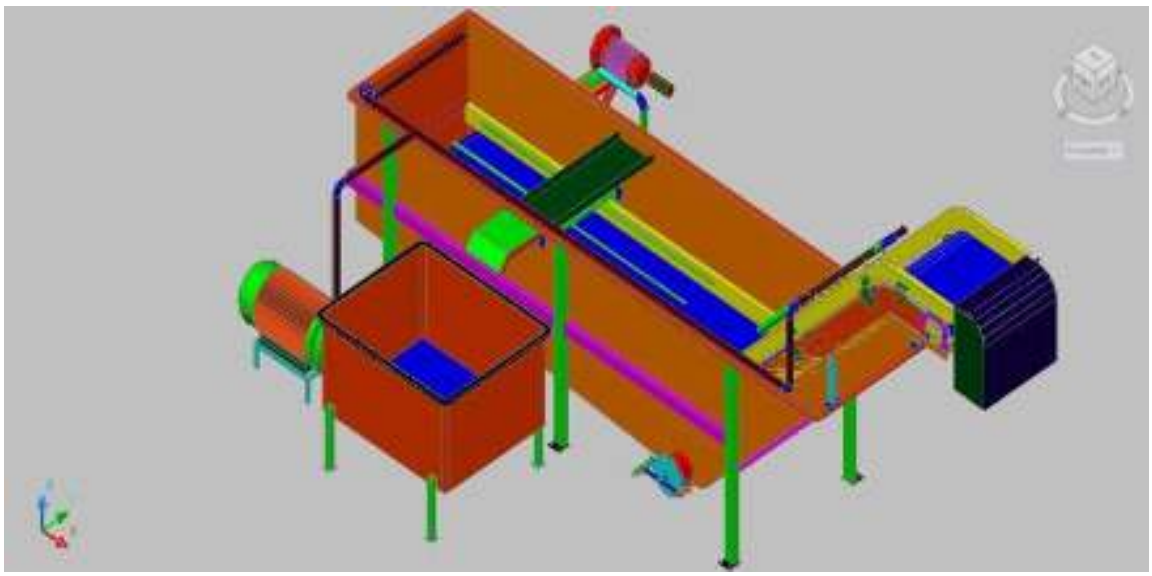
6. Electricity generator: a DG set to produce power for equipment operations. Where alternate energy options (bio-mass based generators, solar powered generators, etc.) are used, add-on technology component will apply.

An area of 9 x 18 metres is the indicative enclosed area for each pack-house. Each pack-house appraised under this component should have minimum equipment to facilitate the basic sorting and grading. Additionally washing, drying and weighing equipment can also be installed so that product is readied for packaging. In special cases, such as bulk storage for perishables like apples, sorting grading facility is built adjoining the storage facility to sort storable quality. These pack-house facilities can handle up to 150MT per day. Where the sorting grading line incorporates electronic sorting, the related add-on technology component can be applied.

In case pre cooling, cold storage and ripening chamber etc., components incorporated in integrated pack house, the related add-on technology components can be applied as per MIDH norms.

Facility for conveyer belt system depends upon product to be handled. For example in case of mangoes conveyer belt system is used whereas in case of Bananas water troughs are used in place of conveyer belt system.

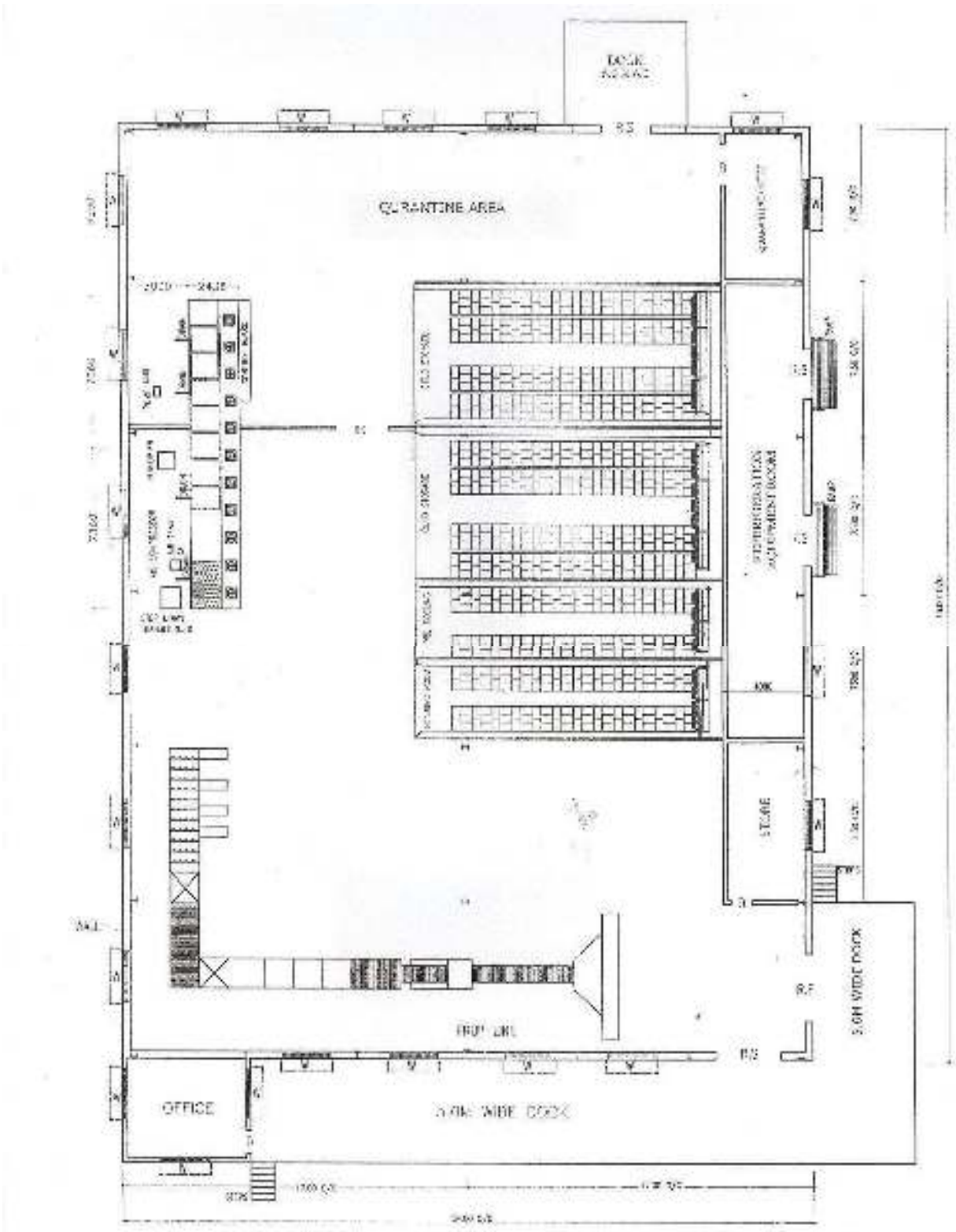
IMAGE OF CONVEYOR BELT



Simple Thematic Layouts for Some Horticulture crops:

Flow chart for Step wise operations in Integrated pack Houses

TYPICAL DRAWING OF INTEGRATED PACK HOUSE WITH ALL ADDITIONAL COMPONENTS



Reference data sheet:

#	Component: Integrated Pack house	Description
1	Pack house Handling capacity	Specify total incoming volume of raw produce in MT/day.
2	Products to be handled	Describe the details of the products planned for value addition.
3	Area of the pack house	Specify the total Plinth area of the construction in m^2.
4	Receiving Area (L x W x H)m	Provide the dimensions of the receiving, weighing and preliminary handling area.
5	Dimension of the building (L x W x H) m	Provide the total covered area of the building.
6	Handling Area (L x W x H)m	External dimensions of the designated sorting, grading, cleaning and packing area.
7	Roof Details	Provide the construction material and specifications of roof.
8	Outer walls and Flooring Details	Description of the outer walls and flooring of enclosed area (food grade materials).
9	Lighting - Internal and External	Type of lighting used (CFL/LED/Normal – total numbers and wattage).
10	Door/ Window Details	Number and Dimensions of openings - doors and windows.
11	Pest control details	Number and details of pest control used (air curtains, other equipment, etc.).
12	Fumigation Details	Specify the details of fumigation if used.
13	De-sapping tables	Specify use of de-sapping tables if used.
14	Mechanised Conveyor system & capacity	Dimensions of conveyor system – belt or roller based, and throughput handling capacity in tons/hour.
15	Washing and Drying machinery (if used)	Specify the details of throughput capacity/motors/pumps/ belts used.
16	Power generating unit	Details of electric generator installed (kVA). If using alternate energy or hybrid systems, provide specifications.
17	Inclusion of Pre-cooling chamber in pack-house	Yes/No
18	Inclusion of staging cold-room in pack-house	Yes/No
19	Layout Drawing	Provide layout drawings of the complete pack house including pre-cooler and staging cold room.

All mandatory rules & regulations (BIS, ISO, IS etc.) relevant to the item must be complied with.

Note: Application format, affidavit, check list and subsidy calculation sheet etc., pertaining to Cold Storage & Ripening chambers may be referred for Integrated Pack Houses

Joint Inspection Report for *INTEGRATED PACK HOUSE* (Release of First Installment)

A Component :

B **Details of Project** :

(i) . Name of the project :

(ii). Address for communication :

with telephone No. :

C **Project Location with Address** :

(i). Survey No :

(ii). Village :

(iii). Mandal :

D Constitution (Individual/ Joint) :

Partnership Firm / Company. :

E (i). Proposed Activity :

(ii). Type :

(iii). Proposed type of cooling system :

F Name of the Promoter :

G **Present physical status of the project :**

Whether all the machinery installed as

per DPR or not (Please specify) :

H **Bank Details :**

1. Bank Name :
2. Branch :
3. Bank Sanction Date :
4. Loan Account No :
5. Bank disbursement statement with :

A/c. No. :

6. Letter from Banker :

(Subsidy Account no. given by bank)

Certificates:

1. This is to certify that the promoter has established Integrated pack house 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 TO CONDUCT JOINT INSPECTION BY THE COMMITTEE FOR INTEGRATED PACK HOUSE 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:					

- The promoter has fulfilled all the observations made in the technical report.

If the capacity is less than 5000 MT actual cost and capacity is considered for calculation.

Certificates:

1. This is to certify that the promoter has established Integrated Pack House 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**

JOINT INSPECTION REPORT – INTEGRATED PACK HOUSE

(FOR 1ST INSTALLMENT SUBSIDY RELEASE)

1. Name of the firm:
2. Address:
3. Components & Specifications of Integrated Pack Houses:

S.no	Component	As per DPR		Actual as per inspection		Remarks
		Size	Capacity	Size	Capacity	

4. Component wise subsidy:

S.no	Component	Eligible subsidy as MIDH norms

Certificate:

1. This is to certify that the promoter has established Integrated Pack house unit as per the Norms of 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**

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 Integrated pack house 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

5. COLD ROOMS (STAGING)

Pattern of Assistance:

S. No	Item	Max permissible Cost	Pattern of Assistance
1	Cold Rooms (Staging)	Rs. 15.00 lakhs per unit of 30 MTs	Credit linked back ended subsidy @ 35% of the total cost i.e., Rs. 5.25 lakh/unit

6. PRE-COOLING UNIT

Pattern of Assistance:

S. No	Item	Max permissible Cost	Pattern of Assistance
1	Pre-Cooling Unit	Rs. 25.00 lakhs per unit of 6 MTs	Credit linked back ended subsidy @ 35% of the total cost i.e., Rs. 8.75 lakh/unit

7. COLD ROOMS WITH ADD ON TECHNOLOGY FOR SOLAR ENERGY (STAGING):

Pattern of Assistance:

S. No	Item	Max permissible Cost	Pattern of Assistance
1	Cold Rooms with add on technology for solar energy	Rs. 15.00 lakhs per unit	Credit linked back ended subsidy @ 35% of the total cost i.e., Rs. 5.25 lakh/unit, as per MIDH GOI norms.

1. The Solar Cold Rooms are aimed to store and increase shelf life of Horticulture produce.
2. The Horticulture Farmers are only eligible for this scheme.
3. **Purchase of Solar Cold Rooms should be from empanelled firms approved by the TS Agros for the year 2019-20.**
4. The assistance will be provided on credit linked back ended subsidy basis. The beneficiary shall take loan from the Bank for purchase of solar cold room then he/she has to submit Bank consent along with loan sanctioned letter and the subsidy will be released to the loan account of the farmer as it considered as a credit linked back ended subsidy.
5. The DHSOs shall scrutiny project proposals and shall obtain DMC approval and send the copy of DMC approval along with applications with all the relevant documents to Head Office for obtaining SLEC approval at State

level. After getting approvals the administrative sanction orders issued to the concerned beneficiaries through District Officers.

6. The farmer/entrepreneur should inform the completion of the project to the concerned DHSO in writing along with photographs.
7. **Joint inspection team should ensure that fabrications of unit is done through empanelled firm approved by the Agros.**
8. The committee consisting DHSO the concerned HO will inspect the project in presence of Promoter and submit the joint inspection report in the prescribed format along with the enclosures therein and photographs of the joint inspection team.
9. The promoters of the unit shall give extensive publicity about functioning of the facility among horticulture growers to enable them to utilize the facility.
10. The promoter shall not claim subsidy from any other Government agency for the same unit. The Department will initiate recovery proceedings if there is any deviation to this condition.
11. Detailed invoice with quantity of materials used for each component of the unit to be submitted along with joint inspection report for release of subsidy.
12. The release of subsidy is subject to actual expenditure, receipts, inspection report, submission of required documents and availability of funds with SHM.
13. Mission Director & Director of Horticulture, Telangana State., Hyderabad reserves the right to modify, add or delete any term/ condition without assigning any reason thereof.
14. A board with the logo of the MIDH shall be kept on the Solar Cold Room, the Logo of Mission for Integrated Development of Horticulture and the matter mentioned below shall be written on the board.

తెలంగాణరాష్ట్రప్రభుత్వం

ఉద్యానశాఖరాయితీతో

సోలార్ శీతల గధి

రైతు పేరు: గ్రామము :

మండలము : జిల్లా :

సెల్ నెం :అనుమతి పొందిన సంవత్సరం :

సామర్థ్యం:

అనుమతి ఇచ్చిన ఉత్తర్వు నెం మొత్తము :యూనిట్ విలువ : (లక్షలలో)

ఉద్యాన శాఖ ద్వారా రాయితీ పొందిన వివరములు : (లక్షలలో)

- Preference should be given to the SC, ST & Women categories beneficiaries.

- The beneficiaries details i.e., filed photos, bills, vouchers, receipts, documents etc., should be uploaded in HORTNET before sending release proposals to the Head Office.

Technical Specifications:

1. The Unit should be with Thermal storage back up for storage of fresh produces- Fruits, Flowers, Vegetables specifically.
2. The Unit should have dimensions of 20 ft X 8ft X 8 ft with solar panel mounted on the roof top of the unit.
3. The temperature should be maintained 2 ^{0}C to 10 ^{0} C and humidity is 80- 95 %.
4. The Unit should have battery less compressor operation.

FORMAT TO CONDUCT FINAL AND JOINT INSPECTION BY THE COMMITTEE UNDER SPECIAL INTERVENTION COMPONENT FOR SOLAR COLD ROOM UNDER MIDH, TELANGANA

COLD ROOMS WITH ADD ON TECHNOLOGY FOR SOLAR ENERGY (STAGING):

Name of the Firm:

Village & Mandal:

District:

Sl.No	Particulars	Project cost Rs. in Lakhs	Subsidy in Lakhs
1	*2*	*3*	*4*
1	Portable 1 MT Pre-Cooler with 5 MT staging facility -VCRS Refrigeration Systems - Variable Frequency Compressor - PUF Panels- 100 mm insulation - Heavy Duty door - 20 ft x 8 ft – easily transportable - 760 cu ft usable volume - 4 – point loading & unloading external cag	15.00	7.50
2	Solar System with back up - 4 KWP solar panels - Solar Mounting Structure - Drive Controller - High Voltage power convertors - Phase Change Material - 24-30 hours back up during non-sunshine hours		
3	Programmed Logic Controller Equipment PLC		
4	5 KVA DG Set (optional)		
	Total	**15.00**	**7.50**

Certificate:

1) This is to certify that Sri./ Smt. _____ has established Solar Cold Room 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) The subsidy amount of Rs. _____/- may be released to the ----------farmer term loan account subject to the terms & conditions which has communicated through administrative sanction order.

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

8. PRIMARY / MOBILE / MINIMAL PROCESSING UNITS

Pattern of Assistance:

S. No	Item	Max permissible Cost	Pattern of Assistance
i	Turmeric Boilers	Rs.4.50 lakhs	Credit linked back-ended subsidy @ 40% of the capital cost of project in general areas. The maximum subsidy is Rs. 1.80 lakh per unit or 40% of the Unit cost, whichever is less
ii	Turmeric Polishing Drums	Rs.1.675 lakhs	Credit linked back-ended subsidy @ 40% of the capital cost of project in general areas. The maximum subsidy is Rs. 0.67 lakh per unit or 40% of the Unit cost, whichever is less
NOTE	The release of back ended subsidy need not be credit linked for the institutions like Public sector units, Panchayats, Cooperatives, Registered Societies/ Trusts and Public limited companies provided they can meet the remaining share of the project cost, out of their own resources.		

1. TURMERIC BOILING UNITS:

1. The assistance is on credit linked back ended mode. However, the release of back ended subsidy need not be credit linked for the institutions like Public sector units, Panchayats, Cooperatives, Registered Societies/ Trusts and Public limited companies provided they can meet the remaining share of the project cost, out of their own resources.
2. Purchase of Turmeric Boiling Units for the year 2019-20 will be as per farmers choice. But the units should be purchased from firms having BIS certification.
3. The Boiling units should contain 4 drums. The capacity of each drum should be 3 qntls and the unit should have a capacity to boil 12 qntls of rhizomes in each cycle.
4. The beneficiary has been given choice to purchase the boiling unit from firm by paying total cost (or) non subsidy amount alone. Incase the beneficiary has paid total cost to firm; the subsidy will be released to beneficiary. If the beneficiary has paid non subsidy only, the subsidy amount will be released to the supplied firm.
5. If beneficiary has opted for paying non-subsidy alone, the concerned beneficiary has to submit the non-subsidy in the form of DD in favour of DHSO concerned.
6. The proposals shall be sent along with DMC approval to the Head office in order to place before SLEC and after getting approval the administrative sanction orders issued to the concerned beneficiaries through District Officers.

7. Preference should be given to the SC, ST & Women categories beneficiaries.
8. The beneficiary should inform the completion of the project to the concerned DHSO in writing along with photograph.
9. The committee consisting DHSO & the concerned HO will inspect the project in presence of Promoter and submit the joint inspection report in the prescribed format along with the enclosures therein and photographs of the joint inspection team with the boiler unit in the back ground and unique identity number of the boiling unit.
10. The promoters of the unit shall give extensive publicity about functioning of the facility among turmeric growers to enable them to utilize the facility.
11. A self-declaration to be taken from concerned farmer that unit will not be misused and shall be enclosed with the joint inspection report.
12. DHSO to assign specific number on boiling drums base plate & drums of Turmeric Boiling units such as SHM/TBU/2019-20/concerned District/Serial no of the District
13. The promoter shall not claim subsidy from any other Government agency for the same unit. The Department will initiate recovery proceedings if there is any deviation to this condition.
14. Detailed invoice with quantity of materials used for each component of the unit to be submitted along with joint inspection report for release of subsidy.
15. The release of subsidy is subject to actual expenditure, receipts, inspection report, submission of required documents and availability of funds with SHM etc.,
16. Mission Director & Commissioner of Horticulture, Telangana State., Hyderabad reserves the right to modify, add or delete any term/ condition without assigning any reason thereof.
17. A board with the logo of the MIDH shall be kept on the Turmeric Boiling unit, The Logo of Mission for Integrated Development of Horticulture and the matter mentioned below shall be written on the board.

తెలంగాణరాష్ట్రప్రభుత్వం

ఉద్యానశాఖరాయితీతో

పసుపు ఉడికించు యంత్రం

రైతు పేరు : గ్రామము :

మండలము : జిల్లా :

సెల్ నెం :అనుమతి పొందిన సంవత్సరం :

అనుమతి ఇచ్చిన ఉత్తర్వు నెం మొత్తము :యూనిట్ విలువ : (లక్షలలో)

ఉద్యాన శాఖ ద్వారా రాయితీ పొందిన వివరములు : (లక్షలలో)

- The beneficiary's details i.e., filed photos, bills, vouchers, receipts, documents etc., should be uploaded in HORTNET before sending release proposals to the Head Office.
- The Release proposals should be sent in the following format along with DMC approval.

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

FORMAT TO CONDUCT FINAL AND JOINT INSPECTION BY THE COMMITTEE FOR TURMERIC BOILING UNITS FOR PRIMARY PROCESSING UNDER MIDH, TELANGANA

1. Name of the Beneficiary:
2. Hortnet ID:
3. Village & Mandal:
4. Category:
5. Type of Turmeric Boiling Unit: 2 Drum / 4 Drum
6. Name of the Supplied firm:
7. Serial number of the unit:
8. Whether logo of MIDH written or not on the unit: Yes / No

9. Total Expenditure:
10. Eligible Subsidy as per MIDH norms:
11. Remarks of the joint inspection team:

Certificate:

This is to certify that the beneficiary has purchased Turmeric Boiling unit from Empanelled firm for the year 2019-20 as per the norms of MIDH. Hence the subsidy amount of Rs._____(Rs.in words) is recommended to release to the beneficiary/ Empanelled firm A/c No: _____ Bank & Branch : _____ IFSC code: _____.

Farmer Horticulture Officer DHSO

2. TURMERIC POLISHING UNITS:

1. The assistance is on credit linked back ended mode. However, the release of back ended subsidy need not be credit linked for the institutions like Public sector units, Panchayats, Cooperatives, Registered Societies/ Trusts and Public limited companies provided they can meet the remaining share of the project cost, out of their own resources.
2. Purchase of Turmeric Polishing Units for the year 2019-20 will be as per farmers choice. But the units should be purchased from firms having BIS certification.
3. The unit must contain 2 Polishing Drums (8/6 ft & it should contain no of polish teeth, wheels & stands). The capacity of the polishing Drums units should be 6-8 qntls in 10-15 minutes.
4. The beneficiary has been given choice to purchase the polishing unit from firm by paying total cost (or) non subsidy amount alone. Incase the beneficiary has paid total cost to firm; the subsidy will be released to beneficiary. If the beneficiary has paid non subsidy only, the subsidy amount will be released to the supplied firm.
5. If beneficiary has opted for paying non-subsidy alone, the concerned beneficiary has to submit the non-subsidy in the form of DD in favour of DHSO concerned.
6. The proposals shall be sent along with DMC approval to the Head office in order to place before SLEC and after getting approval the administrative sanction orders issued to the concerned beneficiaries through District Officers.
7. Preference should be given to the SC, ST & Women categories beneficiaries.
8. The beneficiary should inform the completion of the project to the concerned DHSO in writing along with photograph.

9. The committee consisting DHSO & the concerned HO will inspect the project in presence of Promoter and submit the joint inspection report in the prescribed format along with the enclosures therein and photographs of the joint inspection team with the boiler unit in the back ground and unique identity number of the boiling unit.
10. The promoters of the unit shall give extensive publicity about functioning of the facility among turmeric growers to enable them to utilize the facility.
11. A self-declaration to be taken from concerned farmer that unit will not be misused and shall be enclosed with the joint inspection report.
12. DHSO to assign specific number on boiling drums base plate & drums of Turmeric polishing units such as SHM/TPU/2019-20/concerned District/Serial no of the District
13. The promoter shall not claim subsidy from any other Government agency for the same unit. The Department will initiate recovery proceedings if there is any deviation to this condition.
14. Detailed invoice with quantity of materials used for each component of the unit to be submitted along with joint inspection report for release of subsidy.
15. The release of subsidy is subject to actual expenditure, receipts, inspection report, submission of required documents and availability of funds with SHM etc.,
16. Mission Director & Commissioner of Horticulture, Telangana State., Hyderabad reserves the right to modify, add or delete any term/ condition without assigning any reason thereof.
17. A board with the logo of the MIDH shall be kept on the Turmeric Polishing unit, The Logo of Mission for Integrated Development of Horticulture and the matter mentioned below shall be written on the board.

తెలంగాణరాష్ట్రప్రభుత్వం

ఉద్యానశాఖరాయితీతో

పసుపు పోలీషింగ్ యంత్రం

రైతు పేరు : గ్రామము :

మండలము : జిల్లా :

సెల్ నెం :అనుమతి పొందిన సంవత్సరం :

అనుమతి ఇచ్చిన ఉత్తర్వు నెం మొత్తము :యూనిట్ విలువ : (లక్షలలో)

ఉద్యాన శాఖ ద్వారా రాయితీ పొందిన వివరములు : (లక్షలలో)

- The beneficiary's details i.e., filed photos, bills, vouchers, receipts, documents etc., should be uploaded in HORTNET before sending release proposals to the Head Office.
- The Release proposals should be sent in the following format along with DMC approval.

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

FORMAT TO CONDUCT FINAL AND JOINT INSPECTION BY THE COMMITTEE FOR TURMERIC POLISHING UNITS FOR PRIMARY PROCESSING UNDER MIDH, TELANGANA

1. Name of the Beneficiary:
2. Hortnet ID:
3. Village & Mandal:
4. Category:
5. Type of Turmeric Polishing Unit:
6. Name of the Supplied firm:
7. Serial number of the unit:
8. Whether logo of MIDH written or not on the unit: Yes / No
9. Total Expenditure:
10. Eligible Subsidy as per MIDH norms:
11. Remarks of the joint inspection team:

Certificate:

This is to certify that the beneficiary has purchased Turmeric Boiling unit from Empanelled firm for the year 2019-20 as per the norms of MIDH. Hence the subsidy amount of Rs._____(Rs.in words) is recommended to release to the beneficiary/ Empanelled firm A/c No: _____ Bank & Branch : _____ IFSC code: _____.

Farmer **Horticulture Officer** **DHSO**

IX. TECHNOLOGY DISSEMINATION THROUGH FRONTLINE DEMONSTRATIONS

Pattern of Assistance:

Sl. No.	FLD	Unit	Unit cost	Pattern of Assistance
1	Demonstration of New varieties of Turmeric in Farmer's field	Acre	Rs.50,667/-	75% subsidy i.e., Rs.38,000/- per unit
2	Ultra-High-Density Mango (4m X 2m) with Raised bed technology and Weedmat	Ha	Rs.3.67 lakhs	75% subsidy i.e., Rs.2.75 lakhs per unit
3	Demonstration plots of Seed spices (Cumin, Fennel, Seed coriander, Ajwan, Fenugreek)	Acre	Rs.12,000/-	75% subsidy i.e., Rs.9,000/- per unit

1. Demonstration of New varieties of Turmeric in Farmer's field:

Each Unit : 1 acre

Technology: New varieties with High Curcumin content, chip method of propagation, raised bed cultivation with drip irrigation

Varieties: ACC-48, ACC-79, Rajendra sonali, Rajendra Sonia, PTS-10, CIM-Pitamber

Seed Rate: 2 Qts per Acre

Amount in Rs.

S. No	Component	Description	Unit	Amount	Subsidy @75%	Farmer Share
1	Seed rate	Chip Method of Propagation (@ 2 Qts per Acre, Rs.40 per Kg)	Qts	8000	6000	2000
2	Preparation of raised beds	Raised Bed. Bottom width 4 ft, Top width 2 ½ ft and height 1 ft	LS	2667	2000	667
3	Manures, Fertilisers & Pesticides	FYM, Vermi compost 1000 Kg, Zinc Sulphate 20 Kgs, SSP 6 bags, Neem cake 8 bags, Fertiliser (14:35:14) 3 bags, Urea 3 bags, Micronutrients 2 kgs, 0:0:50 12 kgs etc.,	LS	40000	30000	10000
		Redomil (1kg) for rhizome rot, chlorantraniliprole (100 ml), Dhanuvit, adjuvant (200 ml), TDV, PSB, POM etc., (each 2 kgs) etc.,				
		Total		**50667**	**38000**	**12667**

Maximum eligibility is one unit per beneficiary i.e., one acre

2. Ultra-High-Density Mango (4m X 2m) with Raised bed technology and Weedmat

Cost Norms & Pattern of Assistance

Spacing: 4 m X 2m

Variety: Himayat, Kesar, Dasheri, other improved varieties.

No. of plants: 1250 / Ha. Amount in Rs.

Sl. No.	Name of Sub-component	Unit	Qnty	Rate	1st year (2019-20)		
					Total Cost	Subsidy	Farmer Share
1	Plant Material (@ Rs 40/- per plant)	Nos	1250	40	50000	37500	12500
2	Preparation of raised beds & Planting	LS			50000	37500	12500
3	Inputs						
	Vermi compost/ Fertilizer / pesticides/ fungicides/ micro nutrients etc.,	LS			90000	67500	22500
4	Weed mat (1250plantsX2m plant distanceX1.5 m width of weed mat)	sqm	3750	40	150000	112500	37500
5	Farm Mechanization						
	Taiwan sprayer	Nos	1		15000	11250	3750
	Secateurs	Nos	2	500	1000	750	250
6	Labour charges etc., training, pruning, staking, display board & maintenance of digital photo album	LS			10666	8000	2667
Total					**366666**	**275000**	**91667**

Maximum eligibility per beneficiary is one unit i.e., one Ha.

3. Demonstration plots of Seed spices (Cumin, Fennel, Seed coriander, Ajwan, Fenugreek)

A. Crop: Coriander **Variety: ACR-1**

Sl. No	Component	Description	Rate	Total Cost in Rs.	Subsidy in Rs.	Farmer share in Rs.
1	Seeds	Seed rate @ 4 Kg per Acre	Rs. 120 per Kg	480	480	0
2	Inputs					
i	Manures & Fertilizers	Fertilizers (1 1/2 Bags Urea, 2 Bags SSP, 1 Bag MOP), 10 Tonnes FYM	LS	5050	3788	1262
ii	PP Chemicals	Carbendazim-1 Kg, Acephate-1 Kg, Dimethoate 1 litre, Neem Oil 5 litres	LS	2800	2100	700
3	Labour	Field preparation, Sowing, Inter cultivation & Harvesting	LS	3670	2632	1038
	Total			**12000**	**9000**	**3000**

B. Crop: Fenugreek **Variety: AFG-1, AFG-2 & AFG-3**

Sl. No	Component	Description	Rate	Total Cost in Rs.	Subsidy in Rs.	Farmer share in Rs.
1	Seeds	Seed rate @ 5 Kg per Acre	Rs. 60 per Kg	300	300	0
2	Inputs					
i	Manures & Fertilizers	Fertilizers (1 Bag Urea, 2 Bags SSP, 1 Bag MOP, 1 Bag Ammonium sulphate), 5 Tonnes FYM	LS	5230	3998	1232
ii	PP Chemicals	Carbendazim-1 Kg, Profenophos-1 litre, Dimethoate 1 litre, Neem Oil - 5 litres	LS	2800	2100	700
3	Labour	Field preparation, Sowing, Inter cultivation & Harvesting	LS	3670	2602	1068
	Total			**12000**	**9000**	**3000**

C. Crop: Ajwain

Sl. No	Component	Description	Rate	Total Cost in Rs.	Subsidy in Rs.	Farmer share in Rs.
1	Seeds	Seed rate @ 2 Kg per Acre	Rs. 200 per Kg	400	400	0
2	Inputs					
i	Manures & Fertilizers	Fertilizers (1 Bag Urea, 2 Bags SSP, 1 Bag MOP), 5 Tonnes FYM	LS	4500	3375	1125
ii	PP Chemicals	Carbendazim-1 Kg, COC-2 Kgs, Profenophos- 1 litre, Neem Oil - 5 litres	LS	3500	2625	875
3	Labour	Field preparation, Sowing, Inter cultivation & Harvesting	LS	3600	2600	1000
	Total			**12000**	**9000**	**3000**

D. Crop: Fennel **Variety: AF-2**

Sl. No	Component	Description	Rate	Total Cost in Rs.	Subsidy in Rs.	Farmer share in Rs.
1	Seeds	Seed rate @ 4 Kg per Acre	Rs. 130 per Kg	520	520	0
2	Inputs					
i	Manures & Fertilizers	Fertilizers (1 Bag Urea, 2 Bags SSP, 1/2 Bag MOP), 5 Tonnes FYM	LS	4000	3000	1000
ii	PP Chemicals	Carbendazim-1 Kg, COC-2 Kgs, Dimethoate- 1 litre, Neem Oil - 5 litres	LS	3500	2625	875
3	Labour	Field preparation, Sowing, Inter cultivation & Harvesting	LS	3980	2855	1125
	Total			**12000**	**9000**	**3000**

E. Crop: Cumin **Variety: GC-2**

Sl. No	Component	Description	Rate	Total Cost in Rs.	Subsidy in Rs.	Farmer share in Rs.
1	Seeds	Seed rate @ 4 Kg per Acre	Rs. 280 per Kg	1120	1120	0
2	Inputs					
i	Manures & Fertilizers	Fertilizers (2 Bags Urea, 2 Bags SSP, 1/2 Bag MOP), 5 Tonnes FYM	LS	4000	3000	1000
ii	PP Chemicals	Carbendazim-1 Kg, COC-2 Kgs, Dimethoate- 1 litre, Neem Oil - 5 litres	LS	3500	2625	875
3	Labour	Field preparation, Sowing, Inter cultivation & Harvesting	LS	3380	2255	1125
	Total			**12000**	**9000**	**3000**

Guidelines for Frontline Demonstrations in Farmers Field during 2019-20

Objectives:

- To demonstrate improved Crop Production Technologies and varieties of Turmeric, Mango & in the farmers' fields.
- To popularize the newly notified and improved varieties/technologies for varietal diversification and efficient management of resources.
- To encourage the cultivation of seed spices in the state to meet the consumption requirements of Seed spices in Telangana.

IMPLEMENTATION

1. Turmeric:

- The Demonstration of New varieties of Turmeric in Farmer's field were proposed as per the recommendations of Value chain analysis study conducted by MIDH, GoI through Directorate of Arecanut and Spices Development, Kerala during 2017-18.
- The varieties of turmeric having more curcumin percentage and high yielding ability like ACC-48, ACC-79, Rajendra Sonali, Rajendra Soniya, CIM-Pitamber, PTS-10 etc. are to be demonstrated.
- The demonstrations have to be conducted in cluster approach.
- Chip method of propagation and Raised bed method of cultivation has to be followed with micro irrigation system.
- Maximum eligibility is one unit per beneficiary i.e., one acre.
- The farmers shall pay non-subsidy amount for seed material in the form of DD in favour of DHSO.
- The DHSOs of concerned districts has to procure seed material from reputed Research Station or previous FLD beneficiary or Turmeric Research Station, Kammarpally.

- The scientists of TRS, Kammarpally should be involved in procurement of Seed Material and technology demonstration in FLD fields.
- The DHSOs of concerned district are permitted to utilize available funds for procurement of Seed material. The same shall be reimbursed during disbarment of subsidy.
- The Subsidy pertaining to Seed material shall be reimbursed to DHSO and the Subsidy amount pertaining to inputs and others shall be released to the farmers after submission of release proposals with the approval of DMC and Hortnet filing.

2. Mango: Ultra-High-Density (4m X 2m) with Raised bed technology and Weed-mat.

- The Mango varieties *viz.,* Himayat, Kesar, Dasheri, other improved varieties only to be taken up for FLDs.
- The maximum eligibility is one unit per beneficiary *i.e.,* One Ha.
- Priority should be given to procure plant material from tied-up Horticultural farms / Research stations of PJTS Agril. University / SKLTS Horti. University only.
- However, farmers shall be permitted to purchase plant material from private nurseries if variety is not available in tied-up Horticultural farms / Research stations.
- The DHSO should organize an exposure visit to the selected FLD beneficiaries to Centre of Excellence, Mulugu.
- Planting on Raised Beds, Drip irrigation, weed-mat are mandatory components for FLDs.
- The DHSO/HO should visit the FLD fields at weekly intervals and should guide the farmers on timely Training & Pruning operations and other management practices.

3.Seed Spices (Coriander, Fenugreek, Ajwain, Cumin & Fennel)

- Coriander, Fenugreek, Ajwain, Cumin and Fennel are proposed to demonstrate through FLDs in farmer fields to encourage the cultivation of seed spices in the state to meet the consumption requirements and also to reduce the import of seed spices from Rajasthan & Gujrat.
- The maximum eligibility is one unit per beneficiary *i.e.,* One Acre.
- The required Seed of respective crops and varieties shall be procured by SHM, Hyd from NRC-Seed Spices, Ajmeer, Rajasthan.
- The subsidy amount pertaining to Seeds shall be released to NRC-Seed Spices, Ajmeer, Rajasthan in advance as 100% subsidy on seed component.
- The DHSO of concerned districts shall identify the beneficiary. The list of the selected beneficiary along with DMC approval should be submitted to SHM, Hyd. The same beneficiary will be sent to exposure visit cum training programme at NRC-Seed Spices, Ajmeer, Rajasthan. The selected

beneficiary should well equipped with cultivation practices of concerned seed spice before sowing.

- The Department shall organize an exposure visit to NRC-Seed Spices, Ajmeer before sowings of FLDs through TSHDCL, Hyd.
- The subsidy amount pertaining to Inputs & Labour charges shall be released to the beneficiary after submission of release proposal by DHSO with the approval from DMC for all components (Seed, input & Labour charges). Though seeds have been supplied in advance by SHM, Hyd, the seed component must be included in subsidy release proposal.

General guidelines for FLDs:

- The site of demonstrations should be at a place easily accessible and at central point to attract large number of audience/farmers for more impact, and easy monitoring and feedback.
- To create better and visible impact of a technology the demonstrations may be conducted in cluster approach.
- The farmers selected for FLDs should be progressive one with lead and who is easily approachable by other farmers.
- Special attention towards soil problems like acidity, alkalinity, micro-nutrients deficiency, soil borne pests and diseases should be tackled before taking up the Frontline demonstrations.
- Display board of size 3' X 4' iron angular frame to be fixed at FLD plot.
- Plot with assured irrigation system should be selected after soil and water analysis.
- Crop specific scientist may be called to the field whenever necessary and printed literature to be given to the farmers.
- Advance planning may be done for the demonstration so that all the critical inputs are arranged in time.
- All the important farm operations may be carried out by the demonstrating farmers under the close supervision of DHSO.
- All-important operations carried in the field should be documented in the registers by concerned HEOs & HOs.
- Monitoring is required on continuous and regular basis through visits to FLD plots, recording observations, getting the feedback from the farmers.
- Monitoring teams consisting of DHSO, HO & HEO concerned District will make visits to such demonstration plots for getting direct feedback and offering suggestions and guidance.
- Calendar of activities should be maintained and concerned officers who ever visit the field should sign in the register.
- The department will not owe any responsibility climatological and weather aberrations.
- The DHSO shall submit the release proposals along with DMC approval after successful demonstration of FLD's. The subsidy shall be released to the beneficiary from Head Office.

- The release of subsidy will be subject to recommendation of the DHSO, expenditure and norms of MIDH.

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

X. 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	100% of the cost

All capacity building programs should 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. Indicative list is enclosed herewith.

2. Exposure Visit of Farmers - Outside the State:

Pattern of Assistance:

Sl. No.	Particulars	Unit	Unit cost	Pattern of Assistance
1	Exposure visit of Farmers – Outside the State	No	Project based as per actual	100% of the cost

1. Exposure Visits to farmers outside the State can be organized by the district officers to the states where precision farming, Hi-tech floriculture, Organic farming, Processing Industries and Hi-tech farming are highly successful and can be emulated by the farmers of our state. And also to places where latest Post harvest technologies are adopted and market facilities are created.
2. The visits should be completed within the financial year 2018-19. It should be ensured that, the exposure visits should invariably cover **18 % SC farmers, 10 % ST farmers** and **33% women** beneficiaries / farmers
3. The eligible expenditure per farmer per day is Rs.1000/- (Rupees Thousand only) and limited to 6 days stay outside state (including Travel). The travel expenses will be based on actual bus/train fare.
4. Before organizing the visit, specific proposals should be sent by district officers indicating the tentative tour programme, place of exposure visit, list of identified farmers and purpose of exposure visit and prior permission has to be obtained.
5. Programme to be documented. The team should record interviews with the successful farmers. A compendium should be submitted to the office along with expenditure statement, photographs and CDs. It is mandatory for the team to interact with the officials of Horticulture / Agriculture Department and obtain their observations.

REPORT ON EXPOSURE VISITS (Minimum 10 Pgs per Visit)

1. Name of the District:
2. Place of Visit
3. No. of Farmers
4. Village & Mandal
5. Objective of the Visit
6. Duration (Dates) :
7. List of Places / Organizations visited:
8. Lessons learned:
9. Comments / observations of the Farmers:

- The Report should be sent in A4 size papers, in Times New Roman Font (14 for Sub headings and 12 for matter).
- Minimum 6 to 8 Photographs should be incorporated at appropriate places in the note along with captions.
- List of farmers should be enclosed. A statement showing component wise expenditure should be enclosed.
- Follow up action after the field visits by the Department to take up the activities.

3. Training/ Study tour of Technical Staff to Other states

Pattern of Assistance:

Sl. No.	Particulars	Unit	Unit cost	Pattern of Assistance
1	Study tour to progressive states/units (group of minimum 5 participants)	No	Rs.800/- per day per participant plus TA/DA, as admissible	100% of the cost

Under this Programme a group of minimum of 5 participants from depart-mental officers will be nominated by SHM with the approval of DOH/Mission Director to the other States, GOI Institutions, National Institutions and Research Centres etc., The amount admissible will be Rs.800/- per day per participant plus TA/DA as admissible as per APTA Rules, which will be released after allotment of funds by NHM.