MIDH

Implementation Guidelines

2017-18

INDEX

MISSION FOR INTEGRATED DEVELOPMENT OF HORTICULTURE
TIME-LINE FOR IMPLEMENTATION OF VARIOUS COMPONENTS - 2017-18

GENERAL			
Sl. No.	**Description of work**	**Time frame**	**Action to be taken by**
1	Survey of identified area under all schemes for suitability of that particular crop and irrigation source.	By 1st week of June	HO/ HEO
2	Submission of eligible beneficiary list after verification	By 1st week of June	H.O.
3	Online registration of beneficiaries in HORTNET (along with bank details, photographs, etc.,)	By 2nd week of June	H.O.
AREA EXPANSION (Fresh Plantation)			
Sl. No.	**Description of work**	**Time frame**	**Monitoring by**
1	Issue of Administrative sanction proceedings with approval of District Mission Committee (DMC)	By 3rd week of June, 2017	DH& SO
2	Completion of pitting	By 4th week of June 2017	H.E.O.s
3	Issue of permits for supply of plant Material	By 3rd week of July 2017	H.E.O / H.O.
4	Completion of planting	By 4th week of July 2017	H.E.O.s
5	Physical verification of field	1st week to 3rd week of August - 2017	H.O. / DH & SO
6	Collection of bills and uploading of bills and photographs in Hortnet	By 4th week of August 2017	H.E.O. / H.O.
7	Final DMC approval for release of funds	1st to 3rd week of September, 2017	DH & SO / HO
8	Forwarding to ED login for release	By 4th week of September, 2017	DH & SO / HO
9	Release of funds from Head office through DBT	Based on receipt of release proposals	ADH at Head Office
2nd & 3rd YEAR MAINTENANCE			
1	Survival Verification	By 2nd week of June,2017	H.E.O. / H.O.
2	Preparation of beneficiary list	By 3rd week of June, 2017	DH & SO / H.O.
3	Placing of indents	By 1st week of July 2017	H.O.s / DH & SO

4	Issue of permits for supply of plant material for gap filling	By 1st week of July 2017	H.O.s / DH & SO
5	Supply of plant Material for gap filling	By 2nd week of July, 2017	H.E.O / H.O.
6	Uploading of beneficiary details along with photographs in Hortnet	By end of July, 2017	H.E.O / H.O.
7	Forwarding to ED login for release	By 1st week of August 2017	DH & SO
8	Disbursement of Cash Assistance online through DBT	Based on receipt of release proposals	ADH Head Office
PROTECTED CULTIVATION			
1	Forwarding of proposals, with DMC approval to Head office.	By 2nd week of June 2017	DH& SO
2	Obtaining approval in SLEC meeting	Based on ensuing SLEC	Head office
3	Issue of Sanction Proceedings	Based on SLEC Meeting	ADH Head office
4	Organizing Exposure Visits	By end of July 2017	H.O. / DH & SO
5	Completion of erection of structure / planting	60 days from issue of administrative sanction orders	HEO / MIO
6	Inspection by the committee	As per completion	All the Committee Members
7	Release of the subsidy through DBT	Based on joint inspection report	ADH Head office

FARM PONDS			
Sl. No.	**Description of work**	**Time frame**	**Action to be taken by**
1	Technical feasibility	By 2nd week of July, 2017	HO& MI Engineer
2	Issue of administrative sanction duly obtaining DHM approval	By end of July, 2017	DH & SO
3	Organizing Training programme	By 2nd week of August, 2017	HO/ DH & SO
4	Excavation of Farm pond	Within 25 days after receipt of administrative sanction from the DH & SO	FARMER
5	Lining with geo membrane sheet	Within 20 days after excavation and consolidation of farm pond	FARMER
6	Fencing, display board, erection of sand filter and connection to drip system.	Within 10 days after sheet laying	FARMER

MISSION FOR INTEGRATED DEVELOPMENT OF HORTICULTURE

IMPLEMENTATION GUIDELINES - 2017-18

A. Norms & Pattern of Assistance and Popularization of Scheme

1. Norms would be as per the GOI norms fixed for the year 2014-15 and shall be applicable in subsequent years unless modified. The guidelines are described in subsequent pages of this booklet.
2. The Commissioner of Horticulture and Mission Director shall make necessary tie-ups arrangements every year and empanel reputed firms/suppliers for supply/sale of planting material and inputs / materials under above schemes strictly as per the guidelines issued by Govt. of India from time to time.
3. Component is to be implemented as per the rates circulated, firms empanelled and instructions issued by Commissioner of Horticulture and Mission Director, NHM from time to time.
4. The District-level targets communicated by the O/o Commissioner of Horticulture shall further be divided HO wise & Mandal wise by the DLHSCO/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 **twenty years** for orchards.
   ii. For project based activities: registered lease agreement between the parties for **twelve years** for poly houses.
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 choice as per lists communicated from time to time from head office.
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 DLHSCO/DHSO in the prescribed format.
   i. **Form-1in case of non-project based activities**
   Beneficiary can register details through online in Hortnet or deposit the application to DLHSCO/DHSO office through HO's or along with required documents.
   ii. **Form-2in case of project based activities**
   Applications/ Project proposals are to be sent to Head office with the approval of DMC, after approval of competent authority i.e., SLEC, Telangana State, they are forwarded to GoI for further approval 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 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 DLHSCO/DHSO of the concerned district through DLHSCO/DHSO along with his 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, DLHSCO/DHSO will keep proper record of applications.
4. The DLHSCO/DHSO will get the applications registered from a computer, as well maintain hard copies of the same, only after proper scrutiny that-
   i. The farmer-applicant belongs to the concerned district.
   ii. The farmer-applicant is not being given the benefit for the second time for the same component. The certificate to this effect will also be given by the HO.
   iii. Any farmer/applicant who has been benefitted under any scheme since 2005-06 shall not be eligible for the same component again subject to the maximum limit prescribed under the guidelines.
5. DLHSCO/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. DLHSCO/DHSO will accord the approval of case within 7 days of receipt from office.
7. Roster register will be maintained by concerned DHSO/DLHSCO 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 component viz.: Area Expansion, Poly houses/ Shade net Houses, post-harvest units and other physical structures, proper verification shall be done by the HO, DLHSCO/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 report will be done within 5 days of the work completion if done alone by HO; within 15 days if done by team members.

2. In case of purchase of inputs the following guidelines should be followed:

i. 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.

ii. Farmers are free to choose the farm equipments from empanelled firms under MIDH as per conditions prescribed under the specifications.

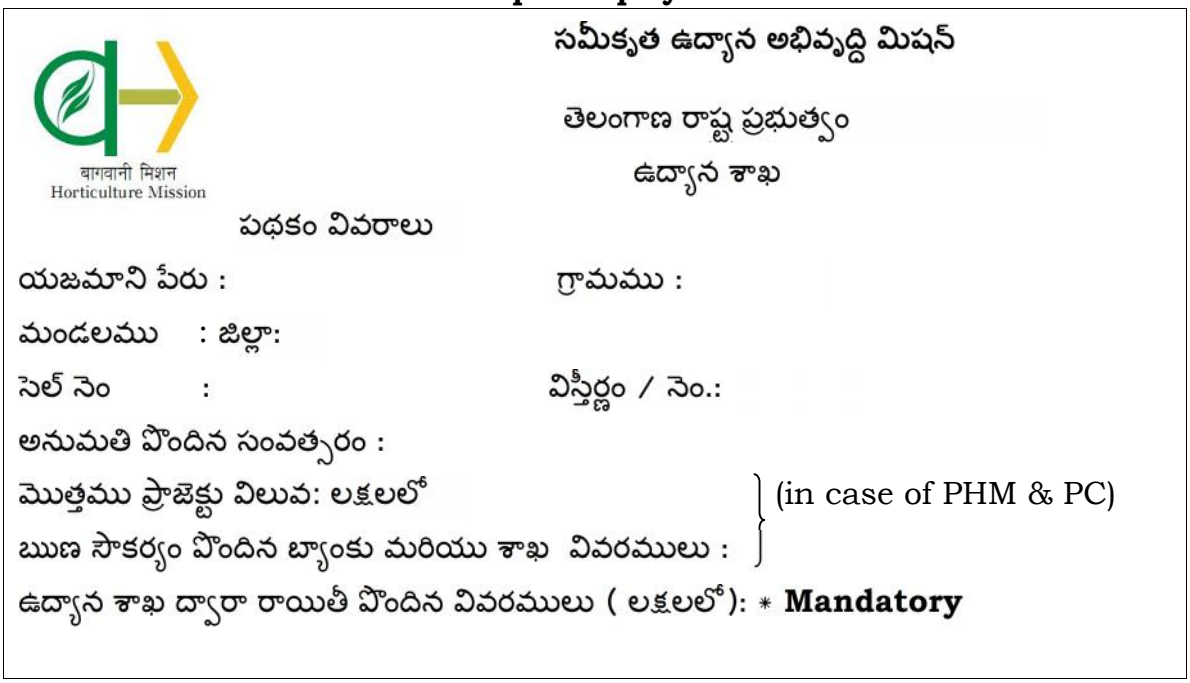
iii. The farmer-applicant will resubmit the original bill back to the DLHSCO/DHSO as a proof of the purchase of the component/input. The DLHSCO/DHSO will thereafter issue a receipt for the original bill to the farmer-applicant.

iv. The physical verification of the material/input purchased will be carried by the team of HEO/HO/DLHSCO/DHSO in the prescribed format.

v. The physical verification report should reach the office of DLHSCO/DHSO within 5 days of purchase.

vi. 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:



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 in all the cases in his jurisdiction, 20% - 50% verification by DLHSCO/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 Officer concerned from Head Quarter, DLHSCO/DHSO, HO concerned, any technical expert in the field of component and representative from concerned bank (if credit linked) 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.

d. All the releases to be completed within a weeks time after receipt of funds from Head office.

G. Reporting:

i. DLHSCO/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. DLHSCO/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. DLHSCO/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**DLHSCO/DHSO will be the controlling officer** for successful implementation of the Scheme (s) and co-ordination of all the schemes under which various components are being implemented as per the scheme guidelines. He / She 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 HTI, Hyderabad.

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 2017– 18

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 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 the schemes, issue of Administrative sanctions and release for all the SHM schemes under MIDH.DLHSCO/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/DLHSCO 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/ Horticulturre / 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 as such proposals should be sent to Head office as per timeline indicated.
13. To ensure transparency separate account should be maintainedat 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 DLHSCO/DHSO/HO concerned personally before updating in **Hortnet**.
15. DLHSCO/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 DLHSCO/DHSO to update the progress reports on 3rdof 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 2017-18

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 allottedto SC/ST farmersonly and 33% of the budget allocation should be earmarked exclusively for women beneficiaries.No deviation is permitted.
8. The HOs / DLHSCO/DHSOs shall hold village wise meetings involving progressive farmers, Gram Sarpanchand 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 tobe 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 DLHSCO/DHSO.
c) After approval by the DLHSCO/DHSO, the webpage pertaining to the list of applicantsfor obtaining Administrative sanction should be sent to the District Mission Committee for approval. And ink signed copy of the webpage should be sent to Head office along with minutes of DMC 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. And ink signed copy of the webpage should be sent to Head office for release of funds.

1. Plantation Infrastructure Development

i. Nurseries:

a. 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 unit of 1 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.

The details of the component wise, Area wise, amount wise are mentioned below.

Sl.No	Name of the Item	Area	Amount in Lakhs
1	Establishment of Scion Block	8 Acres	4.00
2	Installation of Drip Irrigation	8 Acres	4.00
3	Errection of Shadenet	2000 Sqm	6.00
4	Construction of Vermi Compost unit	1 Unit	1.20
5	Electrification of Farm		1.50
6	Land Preparation		1.50
7	Construction of Poly House	1000 sqm	9.35
8	Errection of Permanent Pandals	1/2 acre	1.08
9	Errection of Creeper mesh	1/2 acre	0.30
10	Construction of Office Building cum Training hall		14.00
11	Establishment of Plug type Nursery	1000 sqm(Approx)	54.00
12	Drip Irrigation for Nursery block	2 Acres	0.75
13	Laying of water carrying pipeline in the farm		2.32
	TOTAL		**100.00**

Terms & Conditions:

1. The components covered under Hi Tech Nursery shall be constructed as per the Operational Guidelines of SHM- MIDH.

2. The proposals along with 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 this Administrative sanction orders otherwise sanction orders will deemed to be cancelled and concerned District officers shall be held personally responsible.
5. The concerned District officers are instructed to send along with Photographs, Bills/ Vouchers/ Receipts for the work done in the nursery for release of funds from Head office.
6. 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.
7. The concerned District officers are instructed to send Utilization Certificate for the received amount.
8. The concerned District officersare requested to furnish monthly progress on implementation of the unit as per terms and conditions.
9. They should report any misuse /discrepancy immediately.
10. The concerned District officers arerequested to send stage wise photographs along with no of Training Programmes conducted at Hi –tech nursery.

b) Small Nursery

S.No	Item	Max permissible Cost	Pattern of Assistance
1	Small Nursery (1 Ha.)	Rs. 15.00 lakhs per unit of 1 ha.	100% Unit cost amount to public sector and in case of private sector, credit linked back-ended subsidy of cost, subject to a maximum of Rs. 7.50 lakh/unit, as project based activity. Each nursery will produce a minimum of 25,000 numbers of mandated perennial vegetatively propagated fruit plants/tree spices/plantation crops per year, aromatic plants, duly certified for its quality by concerned agency.

List of Infrastructure to be Developed in Small Nursery

S.No	Name of the component	Estimated Cost (Rs. in lakhs)	Subsidy allowed 100% under public sector (Rs. in lakhs)	Subsidy allowed 50% under private sector (Rs. in lakhs)
1	Establishment of scion block (1.50 acre) required crop wise, variety wise plant material will be procured from Research Station only.	2.00	2.00	1.00
2	Installation of drip irrigation for new scion blocks / existing scion block or orchards	0.60	0.60	0.30
3	Digging of bore well (Depth in meters) & Purchase of submersible pump	2.00	2.00	1.00
4	Erection of shade net 500 sq.mt @ Rs. 710 per sq. mt.	3.55	3.55	1.78
5	Vermicompost unit	0.60	0.60	0.30
6	Electrification of farm to the extent required	2.00	2.00	1.00
7	Land preparation if required	2.00	2.00	1.00
8	Construction of store room	2.25	2.25	1.13
	Total:	**15.00**	**15.00**	**7.50**

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

ii. The proposals along with 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.

iii. 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.

iv. The concerned District officers are instructed to send Utilization Certificate for the received amount.

v. Mother plants have to be procured from ICAR Institutions/ Research Stations only.

vi. The beneficiary has to produce the standard quality plant material. i.e., a minimum of 25,000 numbers of mandated perennial vegetatively propagated fruit plants/tree spices/plantation crops per year, aromatic plants, duly certified for its quality by concerned agency.

vii. The beneficiaries shall apply to DLHSCOs/DHSOs (as per the district targets only) in the prescribed format along with the Pattadar Passbook or Lease Agreement document executed for 10 years along with the certificate issued by Tahsildar / Panchayat Secretary for proof of land with bank consent letter.

viii. The beneficiary shall also enclose the water & soil analysis report from the approved lab.

ix. DLHSCOs/DHSOs should verify the site physically.

x. The beneficiary should enclose the **bank consent** for release of loan amount for establishment of nursery under credit linked back-ended subsidy.

xi. Stage wise photos (i.e., before, during and after the completion of work) should be sent to Head Office before release of payment.

xii. After the inspection of the site by the concerned CLHSCO and DLHSCOs/DHSOs, the proposal with the recommendations will be placed before the District Mission Committee for sanction of the proposals for Establishment of Nurseries.

xiii. After consideration by the District Mission Committee or District Collector the same will be forwarded to O/o State Horticulture Mission

xiv. The same proposal will be placed before the State Level Executive Committee for sanction of the proposals for Establishment of Nurseries. Then only sanction proceedings will be issued.

xv. Administrative sanction orders will be communicated to the beneficiary / District Officer concerned and to the Bank which is providing the loan amount i.e. 50% of project cost.

xvi. The beneficiary should submit the certificate consisting of Non-Submergence of that particular survey no of the land where the nursery is proposed to be taken up.

xvii. The subsidy amount will be released in two equal installments i.e., 1st installment will be released after completion of 50% of the works and 2nd installment will be released after establishment of nursery and after physical verification of the nursery by the DLHSCOs/DHSOs& Technical Team and submission of proposal to NHB for accreditation under copy marked to Mission Director. Then only 2nd installment release will be considered.

xviii. All the components which are proposed for development of nurseries are mandatory for release of subsidy.

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

i. Application form with full details with latest photograph of the applicant.
ii. Land records (Pattadar pass book / pahani given by MRO)
iii. Sanction letter issued by the bank for credit linked back-ended subsidy.
iv. The proposed infrastructure for obtaining the subsidy along with the estimates as per the guidelines (Project proposal).
v. Progeny / scion block is mandatory.
vi. Estimates of civil structures – Prepared by any State Government Engineering Depts.
vii. The photographs of the farm should be produced to the department by the beneficiary before and after the establishment of nursery.
viii. Annual plan for the production of plant material species-wise has to be submitted to Mission Director / DMC. Monthly progress report to be submitted by the farmer to DMC / SHM.

ii. 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.

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 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.

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

1	**Application form of the applicant/promoters**
2	Basic data sheet with complete technical specifications.
3	Detailed project report as per MIDH guidelines.
4	Partnership deed
5	Firm Registration certificate/certificate of Incorporation
6	Bank sanction letter along with appraisal report.
7	Approval from Gram Panchayat/Municipality /corporation.
8	Approval from Pollution Control Board Acknowledgement
9	SSI Registration certificate
10	Fire Department approval with drawings
11	Pan card taken on company name (Xerox copy).
12	Electricity approval
13	KYC documents of all the partners
14	VAT/CST Registrations.
15	Land conversion. (for one acre only)
16	DHM approval (District Collector)
17	Affidavit
18	Land documents (sale deed / Lease deed Agreement) for 10 years along with certificate issued by Tahsildar / Panchayat Secretary for proof of land
19	Land records (Pattadar pass book / pahani given by MRO).

20	The proposed infrastructure for obtaining the subsidy along with the estimates as per the guidelines (Project).
21	Estimates of civil structures – Prepared by any State Government Engineering Depts.
22	Soil Testing report
23	Water Testing report
24	Crops and varieties proposed to be taken up under Seeds Infrastructure Unit
25	Whether the seeds are Open Pollinated/Hybrid/ Breeder/F1/F2
26	Sources of Seed/line & Name of Certification Agency
27	Charted Account
28	Insurance copy of the unit

- 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 DLHSCO/DHSOs in the prescribed format along with the Pattadar Passbook or Lease Agreement document executed for 10 years along with the certificate issued by Tahsildar / Panchayat Secretary for proof of land.
- The beneficiary shall also enclose the water & soil analysis report from the approved lab.
- The beneficiary should enclose the **bank consent** for release of loan amount for establishment of nursery under credit linked back-ended subsidy.
- After the inspection of the site by the concerned H.O. and DLHSCO/DHSO, the proposal with the recommendations will be placed before the District Mission Committee (DMC) for sanction of the proposals for Establishment of TC Lab.
- After consideration by the DMC approval the same will be forwarded to O/o State Horticulture Mission along with bank consent letter.
- The same proposal will be placed before the State Level Executive Committee for sanction of the proposals.
- The District officer has to forward 2sets 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., and enclosing the documents as per the checklist.
- After approval by the SLEC meeting administrative sanction orders will be communicated to the beneficiary / District Officer concerned and to the Bank which is providing the loan amount i.e. 50% of project cost.

- The subsidy amount will be released in two equal installments i.e., 1st installment will be released after completion of 50% of the works and 2nd installment will be released after establishment of Seed processing Unit and after physical verification of the unit the District Officers along with Technical Teams.
- Stage wise photos should be enclosed along with the proposals for release of subsidy.

RELEASE PROPOSALS FOR ESTABLISHMENT OF SEED INFRASTRUCTURE

AT _____ (V)_____(M), _____DIST

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**
		---	

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) while submitting project to State MIDH Cell for release of 1st installment.

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/ Joint Individual/Partnership Firm/ Company.	:	
E	(i). Proposed Activity	:	Seed Infrastructure Unit
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:

1. This is to certify that the promoter has established Seed Infrastructure Unit as per the norms of the MIDH.
2. This is to certify that the promoter has fulfilled all the observations made in the tech. viability report.

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

4. An amount of Rs._____ may be released towards 1ST installment to the subsidy reserve fund account bearing No: ----------, IFSC Code:……., Bank:----------, Branch:----------.

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 TO CONDUCT FINAL AND JOINT INSPECTION BY THE COMMITTEE FOR SEED INFRASTRUCTURE UNIT 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:

5. This is to certify that the promoter has established Seed Infrastructure Unit as per the norms of the MIDH.
6. This is to certify that the promoter has fulfilled all the observations made in the tech. viability report.
7. This is to certify that the project is eligible to avail subsidy of Rs. _____
8. An amount of Rs._____ may be released towards 2nd and final installment.

Promoter **TSG Member/Scientistfrom DATT Centre**

Member from NABCONS **Banker** **CLHSCO** **DLHSCO/DHSO**

Format –IV

SUBSIDY CALCULATION SHEET

Name of the Seed Processing Unit:
Numbers of Floors:

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.
2. This is to certify that the promoter has fulfilled all the observations made in the tech. viability report.
3. This is to certify that the project is eligible to avail subsidy of Rs. _____ .
4. An amount of Rs._____ may be released towards 2nd and final installment to the subsidy reserve fund account bearing number : -------- and IFSC Code: ----------, Bank:----------, Branch:----------.

Promoter **TSG Member/Scientist from DATT Centre**

Member from NABCONS **Banker** **CLHSCO** **DLHSCO/DHSO**

iii. Establishment of Tissue Culture Unit

Objective:

- To encourage production and supply of good quality planting material in private sector by setting up TC lab and to generate employment.
- Sanction of TC unit as per the norms of MIDH under Private Sector, will be considered by State SLEC meeting.

Total Unit Cost: Rs. 250.00 lakhs/unit

S.No	Item	Max permissible Cost	Pattern of Assistance
i	Setting up of new TC Units	Rs.250.00 lakhs/Unit	100% Unit cost to public sector and in case of private sector, credit linked back ended subsidy @ 40% of cost. Each TC unit will produce a minimum of 25 lakh plants/ year of mandated crops, duly hardened for which protocols are available for commercial use.

- 100% of total cost to public sector and in case of private sector, credit linked back ended subsidy @ **40%** of cost i.e., Rs. 100.00 lakhs/unit.

List of Documents to be submitted by the applicants for Establishment of TC Unit

1	Application form of the applicant/promoters
2	Basic data sheet with complete technical specifications.
3	Detailed project report as per MIDH guidelines.
4	Partnership deed
5	Firm Registration certificate/certificate of Incorporation
6	Bank sanction letter along with appraisal report.
7	Approval from Gram Panchayat/Municipality /corporation.
8	Approval from Pollution Control Board Acknowledgement
9	SSI Registration certificate
10	Fire Department approval with drawings
11	Pan card taken on company name (Xerox copy).
12	Electricity approval
13	KYC documents of all the partners
14	VAT/CST Registrations.

15	Land conversion. (for one acre only)
16	DHM approval (District Collector)
17	Affidavit
18	Land documents (sale deed / Lease deed Agreement) for 10 years along with certificate issued by Tahsildar / Panchayat Secretary for proof of land
19	Land records (Pattadar pass book / pahani given by MRO).
20	The proposed infrastructure for obtaining the subsidy along with the estimates as per the guidelines (Project).
21	Estimates of civil structures – Prepared by any State Government Engineering Depts.
22	Charted Account
23	Insurance copy of the unit

- The beneficiary has to establish the proposed infrastructure with total cost of Rs.250.00 lakhs as per the Government of India operational guidelines of MIDH.
- The beneficiary has to produce the standard quality plant material i.e., 25 lakh plants/ year of mandated crops, duly hardened for which protocols are available for commercial use.
- The beneficiaries shall apply to DLHSCO/DHSOs in the prescribed format along with the Pattadar Passbook or Lease Agreement document executed for 10 years along with the certificate issued by Tahsildar / Panchayat Secretary for proof of land.
- The beneficiary shall also enclose the bank consent for release of loan amount for establishment of nursery under credit linked back-ended subsidy.
- After the inspection of the site by the concerned H.O. and DLHSCO/DHSO, the proposal with the recommendations will be placed before the District Mission Committee (DMC) for sanction of the proposals for Establishment of TC Lab.
- After consideration by the DMC approval the same will be forwarded to O/o. State Horticulture Mission along with bank consent letter.
- The same proposal will be placed before the State Level Executive Committee for sanction of the proposals.
- 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.,and enclosing the documents as per the checklist.

- After consideration by the State Level Executive Committee of State Horticulture Mission. The administrative sanction order shall be given to the concerned firm.
- The subsidy amount will be released in two equal installments i.e., 1st installment will be released after completion of 50% of the works and 2nd installment will be released after establishment of TC Lab and after physical verification of the TC lab by the District Officer / Technical Teams.
- Stage wise photos should be enclosed along with the proposals for release of subsidy.
- The promoters should supply the seedlings at the rate fixed by the department

Format – I

PRELIMINARY 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/ :

Joint :

Individual/Partnership :

Firm/

Company.

E Proposed Activity :

F Name of the Promoter :

G **<u>Present physical status of the Unit :</u>**

I. **Construction started or not** :

(i) . Land development :

status/boundary/road :

(ii). Connecting road to the :

plot

(iv). No of plants produced :

per Annum

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 **HO** **DLHSCO/DHSO (Concerned)**

FORMAT -II

FORMAT TO CONDUCT FINAL & JOINT INPSECTION BY THE COMMITTEE FOR RELEASE OF 2ND INSTALLMENT TOWARDS ESTABLISHMENT OF TISSUE CULTURE UNIT

Details of Plant & Machinery purchased by M/s. ----------

Date of Inspection:

Sl.No	Description	Quantity (a)	Unit Price Rs. in Lakhs (b)	Total Price Rs. in Lakhs (a X b)	Remarks
1	Autoclave				
2	Laminar air flow cabinet				
3	Magnetic stirrer				
4	Hot air oven				
5	Filter Sterilization Equipment				
6	Electronic weighing balance				
7	Water distillation/ R.O Apparatus				
8	Shaker				
9	Instruments for IR work				
10	Top Pan Balance				
11	Air handling Units				
12	Refrigerator				
13	Air Conditioners				
14	Stereomicroscope				
15	Digital PH meter				
16	Micro -Oven				
17	Shelves/racks & Trays				
18	Laboratory glassware and accessories				
19	Green house material				
20	Shadenet facilities 5.00				
21	Homogeniser				
22	Vaccume cleaner				
23	Culture Trolleys				
24	Electrical Fixtures and Fittings				
25	Generator and Transformer				
	TOTAL				

Certificates:

1. This is to certify that the promoter has established Tissue culture Unit as per the norms of the MIDH.

2. This is to certify that the promoter has fulfilled all the observations made in the tech. viability report.
3. This is to certify that the project is eligible to avail subsidy of Rs. _____
4. An amount of Rs._____ may be released in to the subsidy reserve fund account bearing no:---------, IFSC Code:------ Bank:----------, Branch:---------- towards 2nd& final installment.

Promoter HO TSG Member/ Local Scientist from DATT Centre

Banker Member from NABCONS DLHSCO/DHSO(Concerned)

FORMAT –III

FORMAT TO CONDUCT FINAL & JOINT INPSECTION BY THE COMMITTEE FOR RELEASE OF 2ND INSTALLMENT TOWARDS ESTABLISHMENT OF TISSUE CULTURE UNIT

Details of Civil works taken up and expenditure incurred by M/s. ---------

Sl.No	Particulars	Place	Area in Sq.Ft	Amount in Rs.	Remarks
1	Construction of Ground and first floors & others with RCs slab,				
	False ceiling				
	Working platforms, the following facilities are acailable in the building				
	a) Clean rooms				
	b) Growth rooms				
	c) Storage room for Chemicals				
	d) Bottle Washing , Hand Washing and leg washing				
	e) Sterilization room				
	f) Inoculation rooms				
	g) Office				
	h) Generator room				
	i) Store room				
	Earth work				
	Road formation				
	Boundary wall				
	Underground water sump				
	workers rooms				
	Toilets				
	Gate				
2	Bore Wells				
3	Architects Consultancy				

Certificates:

1. This is to certify that the promoter has established Tissue culture Unit as per the norms of the MIDH.
2. This is to certify that the promoter has fulfilled all the observations made in the tech. viability report.
3. This is to certify that the project is eligible to avail subsidy of Rs.

_____

4. An amount of Rs._____ may be released in to the subsidy reserve fund account bearing no:---------, IFSC Code:------ Bank:----------, Branch:---------- towards 2nd& final installment.

Promoter HO TSG Member/ Local Scientist from DATT Centre

Banker Member from NABCONS DLHSCO/DHSO(Concerned)

FORMAT -IV

COMPONENT WISE RELEASES MADE BY THE BANKER FOR NEW TISSUE CULTURE UNITS

Name of the Firm M/s. --------- Village: & Mandal:

District:

Account No: Bank & Branch: IFSC code:

Sl.No	Particulars	Porject 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	**Plant & Machinery**					
a	Building& Civil Works					
b	Vehicles					
c	Computer Systems					
d	Electrical Fittings					
e	Furniture & Fixtures					
	Total					

Representative (Field Officer)
With Seal

FORMAT -V

FORMAT TO CONDUCT FINAL & JOINT INSPECTION REPORT FOR NEW TISSUE CULTURE UNIT BY THE COMMITTEE OF MIDH, TELANGANA

Name of the Firm M/s. ---------- Village: & Mandal:

District:

Sl.No	Particulars	Project Cost		Actual investment as per the Joint Inspection team	
		As per Project report	As appraised by Banker		
1	*2*	*3*	*4*	*5*	*6*
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				
4	Computers & Furniture				
5	Others please specify				
	Total				
1	Loan amount released by Banker				
2	Promoters Margin money				
	Total				

Note: CA Certificate may be obtained

Certificate:

5. This is to certify that the promoter has established Tissue culture Unit as per the norms of the MIDH.
6. This is to certify that the promoter has fulfilled all the observations made in the tech. viability report.
7. This is to certify that the project is eligible to avail subsidy of Rs. _____
8. An amount of Rs._____ may be released in to the subsidy reserve fund account bearing no:---------, IFSC Code:------ Bank:----------, Branch:---------- towards 2nd& final installment.

Promoter HO TSG Member/ Local Scientist from DATT Centre

Banker Member from NABCONS DLHSCO/DHSO(Concerned)

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

Objective:

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

Non-negotiable under SHM 2017-18 for the Component 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 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. The DLHSCOs/DHSOs &CLHSCOs should be cautious while selecting the beneficiaries.
5. H.E.O./Horticulture Officers of the concerned area should obtain applicationsfrom 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 selected& Micro irrigation should be integrated for better survival of plantations.
7. The farmers can apply in person or registeronline 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 MeeSeva.
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. DLHSCO/DHSO shall organize training programmes to the beneficiaries identified under Establishment of New Gardens, on all aspects of Package of practices followed for specific crops.
11. HO 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, DLHSCO/DHSO should inspect a minimum of 50% of the identified or sanctioned fields under his/her jurisdictionbefore considering.
12. Selection, documentation and Hortnet registration process should be completed in a time bound manner and seasonality must be

DLHSCO/DHSO entered to, for plantation & utilization of inputs at any cost.

13. Before permitting the beneficiaries to start land preparation, pitting etc., the DLHSCO/DHSO should ensure to take approval of DMC for the selected beneficiaries.
14. DLHSCO/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.
15. Intercropping shall be encouraged in all perennial orchards with region specific intercrop as they contribute to soil fertility and income during gestation period.
16. 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.
17. All such uploaded bills should be forwarded to the DLHSCO/DHSO login. In turn the DLHSCO/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.
18. The District officers shall send the beneficiary list along with DMC approval to the Head office for release of Subsidy.
19. The assistance will be provided to the beneficiaries / agency / firmafter filing of all mandatory details in HORTNET.

A. Supply of Plant Material:

1. Priority should be given for supply of plant material from tied-up Horticultural farms / Research stations of PJTS Agril. University / SKLTS Horti. University.
2. 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.
3. 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 DLHSCO/DHSOs duly obtaining necessary bills/invoices from the farm in-charge.
4. In cases when plant material is purchased by the farmers from Research stations or from Pvt. Nurseries, the DLHSCO/DHSO shall release the plant material assistance to the farmers as per the recommendation and certification of HO concerned on bills/invoices submitted by the farmers.
5. Amount shall not be paid to the private nurseries directly.

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

Assistance pertaining to Vermicompost, FYM, irrigation, inter crop, labour charges, 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.

With regards 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) **No. of Plants per Ha. 400**

A.PATTERN OF ASSISTANCE FOR MANGO (5 m x 5m) FOR 1 HA						
Sl. No.	**Name of Sub-component**	**Total Cost (in Rs.)**	**Year wise Assistance per Ha.**			**Eligible Subsidy (in Rs.) per Ha.**
			1st year (2017-18)	**2nd Year (2018-19)**	**3rd year (2019-20)**	
1	**Plant Material (@Rs25/- per plant)**	**13500**	**4000**	**1000**	**400**	**5400**
2	**Inputs**					
i	FYM	7500	1500	750	750	3000
ii	Neem Cake / Vermicompost	4200	790	420	390	1600
iii	Inorganic fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients	9000	1440	900	1260	3600
iv	PP Chemicals/ Bio pesticides	6000	1710	210	480	2400
v	Implements (Secateurs, Spade, Pick axe)	800	400	0	0	400
Total of Inputs		**27500**	**5840**	**2280**	**2880**	**11000**
Total (Plant Material + Inputs)		**41000**	**9840**	**3280**	**3280**	**16400**

ii. SWEET ORANGE / KINNOW / MANDARIN / ACID LIME

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

S. No	Name of sub-component	Total Cost (in Rs.)	Year wise Assistance per Ha.			Eligible Subsidy (in Rs.) per Ha.
			1st year (2017-18)	2nd Year (2018-19)	3rd year (2019-20)	
1	**Plant Material (@ Rs.30/- per plant)**	9990	3336	660	0	**3996**
2	**Inputs**					
i	FYM	6400	1536	0	0	**1536**
ii	Neem Cake/ Vermicompost	3000	720	240	240	**1200**
iii	Inorganic fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients	16124	2849	1980	2460	**7289**
iv	PP Chemicals/ Bio pesticides	4094	960	320	500	**1780**
v	Implements (Secateurs, Spade, Pick axe)	400	200	0	0	**200**
	Sub-Total	**30018**	**6265**	**2540**	**3200**	**12005**
	Total	**40008**	**9601**	**3200**	**3200**	**16001**

iii. GUAVA 3M X 3M: No. of Plants per Ha. 1111

Sl. No	Name of Sub-component	Total Cost (in Rs.)	Year wise Assistance per 1 Ha.			Eligible Subsidy (in Rs.) per Ha.
			1st year (2017-18)	2nd Year (2018-19)	3rd year (2019-20)	
1	**Plant Material (@ Rs.20/- per plant)**	**29980**	**8888**	**2216**	**888**	**11992**
2	**Inputs**					
i	FYM	15627	2852	1080	2240	**6172**
ii	Neem Cake/ Vermicompost	8770	2200	690	618	**3508**
iii	Inorganic fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients	10600	2400	800	1040	**4240**
iv	PP Chemicals/ Bio pesticides	7550	860	1080	1080	**3020**
v	Implements (Secateurs, Spade, Pick axe)	800	400	0	0	**400**
	Sub-Total	**43347**	**8712**	**3650**	**4978**	**17340**
	Total (Plant Material + Inputs)	**73327**	**17600**	**5866**	**5866**	**29332**

IV.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 1 Ha.			Eligible Subsidy (in Rs.) per Ha.
			1st year (2017-18)	2nd Year (2018-19)	3rd year (2019-20)	
1	**Plant Material (@ Rs.25/- per plant)**	22525	6670	1670	670	**9010**
2	**Inputs**					
i	FYM	9110	3644	0	0	**3644**
ii	Neem Cake/ Vermicompost	4000	960	320	320	**1600**
iii	Inorganic fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients	20645	3333	2338	2548	**8219**
iv	PP Chemicals/ Bio pesticides	10000	1197	1006	1796	**3999**
v	Implements (Secateurs, Spade, Pick axe)	400	200	0	0	**200**
	Sub-Total	**44155**	**9334**	**3664**	**4664**	**17662**
	Total	**66680**	**16004**	**5334**	**5334**	**26672**

V. APPLE BER PLANTATION

Spacing: 5 M X 5 M No. of plants: 400 / Ha

Sl. No.	Name of sub-component	Indicative cost given by GoI (in Rs.)	Worked out at State Level (SHM) (in Rs.)	Year wise Assistance per Ha.			Eligible Subsidy (in Rs.)
				1st year (2017-18)	2nd Year (2018-19)	3rd year (2019-20)	
1	**Plant Material (@ Rs.40/- per plant)**	12000	21600	6400	1600	640	**8640**
2	**Inputs**						
i	FYM	23000	3750	800	300	400	**1500**
ii	Neem Cake/ Vermicompost		3000	400	200	600	**1200**
iii	Inorganic fertilizers, Water Soluble fertilizers, Bio fertilizers and Micro Nutrients		2600	400	200	440	**1040**
iv	PP Chemicals/ Bio pesticides		4050	400	500	720	**1620**
	Sub-Total	**23000**	**13400**	**2000**	**1200**	**2160**	**5360**
	Total	**35000**	**35000**	**8400**	**2800**	**2800**	**14000**

Input Package for crops covered under Area Expansion:

B.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		4	2	2
	Vermicompost / Neem Cake	Kgs	40 Kg	800	480	640
II	**Inorganic Fertilizers**					
	S.S.P.	Kgs	50 Kg	400	160	240
	Urea	Kgs	50 Kg	32	64	96
	M.O.P.	Kgs	50 Kg	25	48	73
III	**Bio Fertilizers**					
	P.S.B.	Kgs	500 gr	8	8	8
IV	**Micronutrients**					
	Zn, Mg, Boron & others as per soil testing report	Kgs	Kg	8	13	17
V	**Plant Protection Chemicals**					
	Chloropyriphos 20% EC	Ltrs	500 ml	3	3	3
	Quinolphos 25% EC	Ltrs	500 ml	2	2	2
	C.O.C. 50% WP/ Folidol Dust	Kgs	500 gr	1	1	1
	Sticking Agent	Ltrs	500 ml	2	2	2
VI	**Bio Pesticides**					
	T. viride / T.harzianaum / Pseudomonas florescence 1x10 cfu/gm	Kgs	500 gr	8	8	8

A. INPUT PACKAGE FOR GUAVA 3M X 3M PER ACRE						
Spacing 3 m X 3 m			**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	3
	Vermi-compost	Kgs	40 Kg	640	320	640
II	**Inorganic Fertilizers**					
	S.S.P	Kgs	50 Kg	320	118	236
	Urea	Kgs	50 Kg	0	84	167
	M.O.P	Kgs	50 Kg	0	36	72
	19-19-19	Kgs	2 Kg	3	4	6
III	**Bio-Fertilizers**					
	P.S.B	Kgs	500 gr	3	3	3
	Azospirillum	Kgs	500 gr	3	3	3
IV	**Micronutrients**					
	Zn, Mg, Boron & others as per soil testing report	Kgs	Kg	3	4	6
V	**Plant Protection Chemicals**					
	Chloropyriphos 20% EC	Ltrs	500 ml	1	2	2
	Dichlorvas 76% EC	Ltrs	500 ml	1	1	1
	C.O.C. 50% WP/ Folidol Dust	Kgs	500 gr	1	1	1
VI	**Bio-pesticides**					

	Trichoderma viridae / T. harzianaum	Kg	500 gr	1	1	1
	Pseudomonas florescence 1x10 cfu/gm	Kg	500 gr	1	1	1

B.INPUT PACKAGE RECOMMENDED FOR SWEET ORANGE / KINNOW / MANDARIN (6M X 6M) Per Acre						
Spacing: 6 M X 6 M				No. of plants per Acre : 111		
Sl. No	**Inputs**	**Unit**	**Packing size**	**1st year**	**2nd year**	**3rd year**
I.	**Organic Manures**					
	Farm Yard Manure	Tones		2.5	1.5	2
	Vermicompost / Neem Cake	Kgs	40 Kg	100	150	200
II	**Inorganic Fertilizers**					
	S.S.P.	Kgs	50 Kg	160	120	180
	Urea	Kgs	50 Kg	40	80	120
	M.O.P.	Kgs	50 Kg	25	50	75
III	**Bio Fertilizers**					
	P.S.B.	Kgs	Kg	6	6	6
	VAM	Kgs	Kg	56	0	0
IV	**Micronutrients**					
	Zn, Mg, Boron & others as per soil testing report	Kgs	Kg	12	17	24
V	**Plant Protection Chemicals**					
	Chlorophyriphos	Ltrs	500 ml	1	1	1
	Prophenophos / Trizophos	Ltrs	500 ml	0.5	0.5	0.5
	C.O.C. 50% WP/ Folidol Dust	Kgs	500 grms	0.5	0.5	0.5
	Mancozeb	Kgs	500 grms	0.5	0.5	0.5
	Sticking Agent – Indetron	Ltrs	500 ml	1	1	1
VI	**Bio Pesticides**					
	Trichoderma	Kgs	Kg	2	2	2
	Pseudomonas	Kgs	Kg	2	2	2

B. INPUT PACKAGE RECOMMENDED FOR ACID LIME (6 M X 6 M) PER ACRE						
Spacing: 6 M X 6 M				No. of plants per Acre : 111		
Sl. No	**Inputs**	**Unit**	**Packing size**	**1st year**	**2nd year**	**3rd year**
I.	**Organic Manures**					
	Farm Yard Manure	Tones		2.5	1.5	2
	Vermicompost / Neem Cake	Kgs	40 Kg	200	150	200
II	**Inorganic Fertilizers**					
	S.S.P.	Kgs	50 Kg	160	120	180
	Urea	Kgs	50 Kg	40	80	120
	M.O.P.	Kgs	50 Kg	25	50	75
III	**Bio Fertilizers**					
	P.S.B.	Kgs	Kg	6	6	6
	VAM	Kgs	Kg	56	0	0
IV	**Micronutrients**					
	Zn, Mg, Boron & others as per soil testing report	Kgs	Kg	12	17	24

V	**Plant Protection Chemicals**					
	Chlorophyriphos	Ltrs	500 ml	1	1	1
	Prophenophos	Ltrs	500 ml	0.5	0.5	0.5
	C.O.C. 50% WP/ Folidol Dust	Kgs	500 grms	0.5	0.5	0.5
	Mancozeb	Kgs	500 grms	0.5	0.5	0.5
	Streptocyclin	Grms	6 grms	36	54	72
	Sticking Agent – Indetron	Ltrs	500 ml	1	1	1
VI	**Bio Pesticides**					
	Trichoderma	Kgs	Kg	2	2	2
	Pseudomonas	Kgs	Kg	2	2	2

B.INPUT PACKAGE FOR POMEGRANATE (5 M X 3 M) PER ACRE						
Spacing: 5 M X 3 M			**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	5	5
	Vermi-compost / Neem Cake	Kgs	40 Kg	400	600	600
II	**Inorganic Fertilizers**					
	S.S.P.	Kgs	50 Kg	350	200	200
	Urea	Kgs	50 Kg	125	255	255
	M.O.P.	Kgs	50 Kg	40	78	78
III	**Bio Fertilizers**					
	P.S.B.	Kgs	Kg	5	5	5
IV	**Micronutrients**					
	Zinc Sulphate (Soil Application)	Kgs	10 Kg	10	10	10
	Boron (Borax 20%)	Kgs	500 gr	1	1	1
	Other Micronutrients based on soil testing report	Kgs	Kg	10	10	10
V	**Plant Protection Chemicals**					
	Copper Sulphate 50% WP	Kg	Kg	4	4	4
	Lime (Lime sulphate)	Kg	5 kg	4	4	4
	Carbendazim 50% WP	Kg	250 gr	1	0.25	0.25
	Fipronil 5% EC	Lit	250 ml	1	0.25	0.25
	Streptocyclin 10%	Grms	6 gr	36	36	36
	Sticking Agent	Lit	500 ml	1	1	1
VI	**Bio Pesticides**					
	Trichoderma viride / T. harzianaum	Kgs	Kg	6	6	6
	*Pseudomonas florescence*1x10 cfu/gm	Kgs	Kg	6	0	0

INPUT PACKAGE FOR APPLE BER PLANTATION 5 X 5 m PER ACRE						
Spacing: 5 X 5		**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		4	2	2
	Neem Cake/ Vermicompost	Kgs	40 Kg	320	320	320
II	**Inorganic Fertilizers**					
	S.S.P.	Kgs	50 Kg	400	120	240
	Urea	Kgs	50 Kg	40	40	80
	M.O.P.	Kgs	50 Kg	40	40	80
III	**Micronutrients**					
	Zn, Mg, Boron & others based on soil testing report	Kgs	Kg	8	12	12
IV	**Plant Protection Chemicals**					
	Chloriphyriphos	Ltrs	500 ml	3	3	3
	Dimethoate	Ltrs	500 ml	2	2	2
	C.O.C.	Kgs	500 gr	1	1	1
	Mancozeb 6.5% + Carbendazim 12% WP	Kgs	500 gr	2	2	2
	Sticking Agent	Ltrs	500 ml	1	2	2

- ✓ But input package for Apple ber is indicated based on research findings for Ber crop.

The District officers are requested to send the following information in the annexure prescribed below which is mandatory for release of subsidy along with proposal from concerned District officer 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																	

V. AREA EXPANSION FOR 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 maximum area of 2 ha per beneficiary)**		
	i) Hybrid	Rs.50,000/ ha	40% of the cost in general areas and in TSP areas (ITDAs) the assistance will be @ 50% of the cost.

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

FOR SC & ST Category:

S. No.	Component	Total permissible cost per Acre (in Rs.)	Subsidy (in Rs.) per acre	Farmer contribution	subsidy to whom to be released
1	Seedlings @ 0.75paise per Seedlings (8,000 seedlings required per 1 acre) (0.75x8000= 6000) including transportation up to mandal point	6000	6000	0	COE, JDM Rs 6000/-
2	Labour charges	5000	0	5000	0
3	Inputs (Fertilizers & Pesticides)	9000	2000	7000	Reimbursement to farmer Rs 2000/-
	TOTAL	**20000**	**8000**	**12000**	

FOR GENERAL Category:

S. No.	Component	Total permissible cost per Acre (in Rs.)	Subsidy (in Rs.) per acre	Farmer contribution	subsidy to whom to be released
1	Seedlings @ 0.75paise per Seedlings (8,000 seedlings required per 1 acre) (0.75x8000= 6000)	6000	5600	400	COE, JDM will receive Rs 400 from farmer and Rs 5600 from MIDH
2	Labour charges	5000	0	5000	0
3	Inputs (Fertilizers & Pesticides)	9000	2000	7000	Reimbursement to farmer Rs 2000/-
	TOTAL	**20000**	**7600**	**12400**	

Cucurbits crops (Bitter Gourd)

FOR SC & ST Category:

S. No.	Component	Total permissible cost per Acre (in Rs.)	Subsidy to SC & ST Beneficiaries (in Rs.) per acre	Farmer contribution	subsidy to whom to be released
1	Seedlings @ 3.55 paise per Seedlings (3,000 seedlings required per 1 acre) (3.55x3000= 10650) including transportation up to mandal point	10650	6000	4650	Subsidy amount of Rs 6000/- and Non-Subsidy amount of Rs.4650/- will be released to COE
2	Inputs (Fertilizers & Pesticides)	9350	2000	7350	Reimbursement to farmer Rs. 2000/-
	TOTAL	**20000**	**8000**	**12000**	

FOR GENERAL Category:

S. No.	Component	Total permissible cost per Acre (in Rs.)	Subsidy to GEN Beneficiaries (in Rs.) per acre	Farmer contribution	subsidy to whom to be released
1	Seedlings @ 3.55 paise per Seedlings (3,000 seedlings required per 1 acre) (3.55x3000= 10650) including transportation up to mandal point	10650	5600	5050	Subsidy amount of Rs 5600/- and Non-Subsidy amount of Rs.5050/- will be released to COE
2	Inputs (Fertilizers & Pesticides)	9350	2000	7350	Reimbursement to farmer Rs. 2000/-
	TOTAL	**20000**	**7600**	**12400**	

- SF/MF/W/SC/ST farmers are eligible.
- Subsidy will be given to maximum 1 acre per beneficiary
- In case of below 1 acre farmers the subsidy will be admissible on prorate basis.
- The non-subsidy portion shall be paid in the form of DD, drawn in favor of "ED, SHM" and the farmer shall submit the necessary bills/ vouchers towards Seed& Inputs for arranging reimbursement of subsidy to the farmers.
- The subsidy portion for seed component will be released to COE, Jeedimetla, Medchal.
- The DLHSCO/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.
- The farmers have to take up Hybrid Vegetable seedlings under cultivation.
- The farmers are to be trained in advance on the latest technologies in cultivation aspects INM / IPM / growing of vegetables under shadenets 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 DLHSCO/DHSOs are not permitted to inter change the budget allocation between subcomponent 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 CLHSCO is responsible for proper inspection, certification of invoice, and obtaining digital photograph of farmers along with material supplied on subsidy in their Jurisdiction.
- They should strictly follow the SC/ST allocations. Priority should be given to woman farmers and SHG groups for production of farming in clusters.
- The CLHSCO should record the data on production / productivity after adoption of latest technology in cluster by farmers.
- The selected farmers are to be trained on latest technology in vegetable cultivation to increase production & productivity, organic cultivation of vegetable management practices, micro irrigation, mulching etc.

- 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.

The District officers are requested to send the following information in the annexure prescribed below which is mandatory for release of subsidy along with proposal from concerned District officer 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																	

Checklist for Inspection for release of funds 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** **DLHSCO/DHSO**

3. 2nd year & 3rd year maintenance

A. 2nd Year maintenance of plantations established during 2016-17

- 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 2016-17)

Sl.No	Name of the Crop	Assistance (in Rs. per Ha.) - **II Year (2016-17)**		
		Plant Material	Inputs	Total Assistance
1	Mango (5m x 5m)(Himayat, Dasheri, Kesar)	1000	2280	3280
2	Citrus (Sweet orange/Kinnow/ Mandarin) (6m x 6m)	660	2540	3200
3	Acid lime (6m x 6m)	660	2540	3200
4	Guava (3m x 3m)	2216	3650	5866
5	Apple Ber (5m x 5m)	1600	1200	2800
6	Fig (2.5m x 2.5m)	3520	3120	6640
7	Custard apple (2.5 x 2.5m)	3200	5280	8480
8	Pomegranate (5m x 3m)	1670	3664	5334
9	Cocoa(3.5m X 3.5m)	218	2383	2601

B. 3rd Year maintenance of plantations established during 2015-16

- 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 2015-16)

Sl. No	Name of the Crop	Assistance (in Rs. per Ha.) - **III Year (2015-16)**		
		Plant Material	Inputs	Total Assistance
1	Mango (5m x 5m)	400	2880	3280
2	Mango (2.5m x 2.5m) / (3 m x 2m)	1600	7360	8960
3	Citrus (Sweet orange/Kinnow/ Mandarin) (6m x 6m)	0	3200	3200
4	Acid lime (6m x 6m)	0	3200	3200
5	Guava (3m x 3m)	888	4978	5866
6	Guava (2m x 1m)	4000	12000	16000
7	Apple Ber (5x5 M)	640	2160	2800
8	Fig (2.5x2.5 M)	1408	5232	6640
9	Custard Apple (2.5x2.5 M)	1280	7200	8480
10	Pomegranate (5m x 3m)	670	4664	5334
11	Cocoa (3.5m X3.5m)	35	1005	1040

- ✓ 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 directly to the District officers who inturn will release the subsidy through online to the beneficiary.
- ✓ The cost of inputs (INM / IPM) towards eligible subsidy shall be released to farmers bank account directly on physical inspection by concerned HO and also on self-certification by farmer and also by random inspection (50%) by DLHSCOs/DHSOs.

The District officers are requested to send the following information in the annexure prescribed below which is mandatory for release of subsidy along with proposal from concerned District officer 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																	

4. 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 life saving irrigation to the crops or orchards during peak / critical stages of summer to save the plants from drying up.

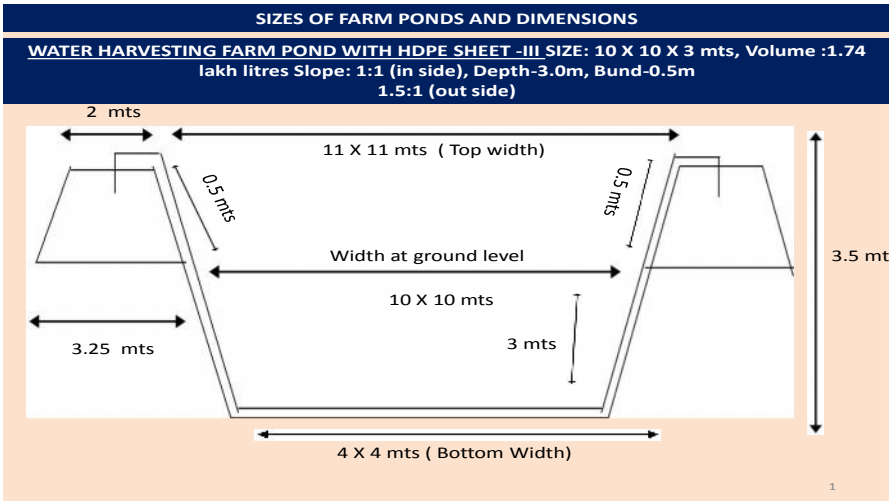
These are constructed by excavating the soil and depositing the earth on the banks to form bund. The HDPE geo-membrane sheet is laid in the excavated pond to arrest seepage and infiltration losses.

Different sizes of Farm ponds:

1. 10mx10mx3m
2. 15mx15mx3m
3. 20mx20mx3m
4. 14mx14mx4m
5. 21mx21mx4m
6. 27mx27mx4m
7. 35mx35mx4m

The details of specifications & subsidy of different sizes of Farm Ponds are as follows:

1) 10X10X3



1. Bottom width 4 X 4m
2. Width at ground level 10 X 10
3. Top width 11 X 11
4. Bund above Ground level 0.5m
5. Depth below Ground level 3m
6. Bund width at top 2m
7. Slope inside 1:1
8. Slope out side 1.5: 1
9. Volume = 1,74,000 Lakh Liters

Calculation:

Volume = Ground surface Area + Bottam Area X Total Depth of the pond

$$= \frac{4X4+10X10}{2} X\ 3$$

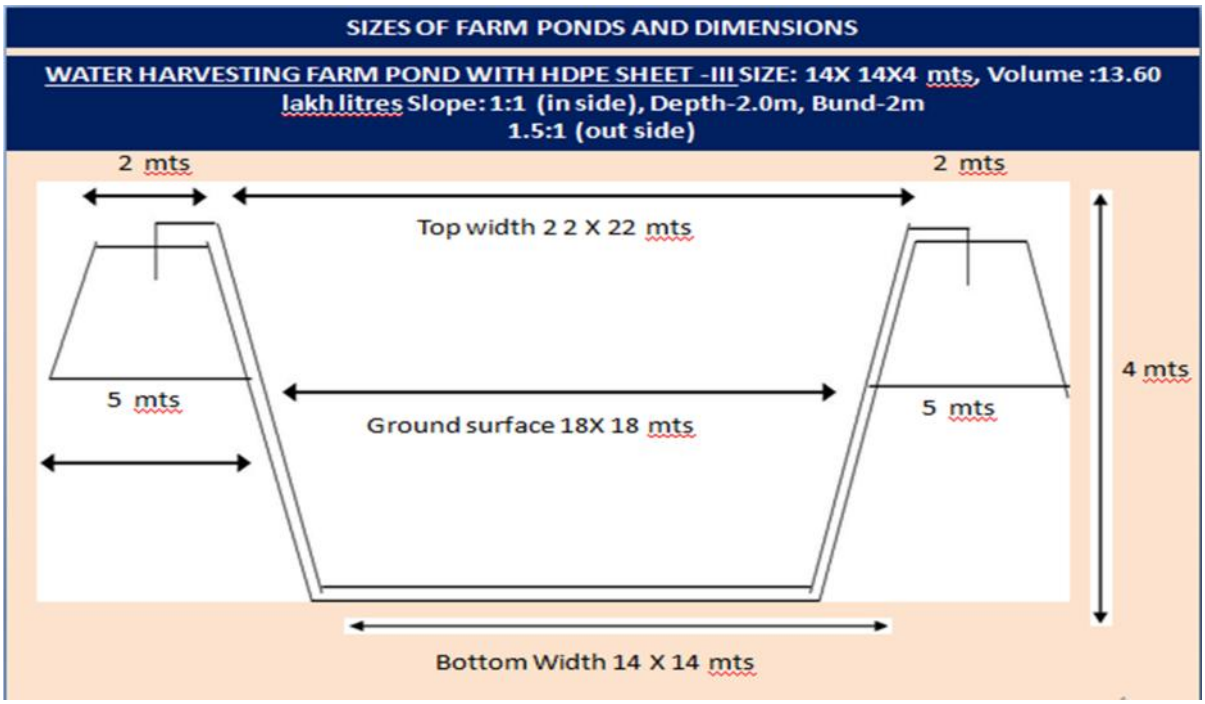
$$= \frac{}{2}$$

= 174cubic mtrs

- One cubic meter = 1000 liters of water
- Hence, the toal volume of the farm pond i.e., 10X10X3 m = 1,74,000 liters.
- Subsidy per one cubic meter = Rs. 62.50/- (as per GoI)
- **The total subsidy is Rs.10,875/-. (as per GoI)**
- **The cost & quantity particulars pertaining to excavation and laying of sheet of the size of 10X10X3 m farm pond are as follows:**

Sl. No.	Estimated Quantity	Description of work	Unit	Rate inclusive of Tax in Rs.	Total Amount in Rs.
01	174	Earth work excavation in ordinary and hard gravelly soils/loose soils etc., depositing on the bank with an initial lead and lift etc., complete with trimming slopes and embankment of 2.0 mts height sectioning, banking with watering and tampering and consolidation with stone roller -2 tones or cattle treading etc., complete	One cubic meter	76.00	13,224.00
02	240	Supplying reinforced HDPE 500 microns geo-membrane polythene sheet including incidental and operational charges etc., and Fixing of i.e. laying, joining of reinforced HDPE 500 microns polythene film sheet including incidental and operational charges etc., of BIS standards IS-15351:2008 / 10889:2004	One square meter	120.00	28,800.00
		TOTAL			**42,044.00**

2) 14 X 14 X 4 m



1. Bottom width 14 X 14
2. Width at ground level 18 X 18
3. Top width 22 X 22
4. Bund above Ground level 2m
5. Depth below Ground level 2m
6. Bund width at top 2m
7. Slope inside 1:1
8. Slope out side 1.5: 1
9. Volume = 13,60,000 liters

Calculation:

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

$$= \frac{14X14+22X22X\ 4}{2}$$

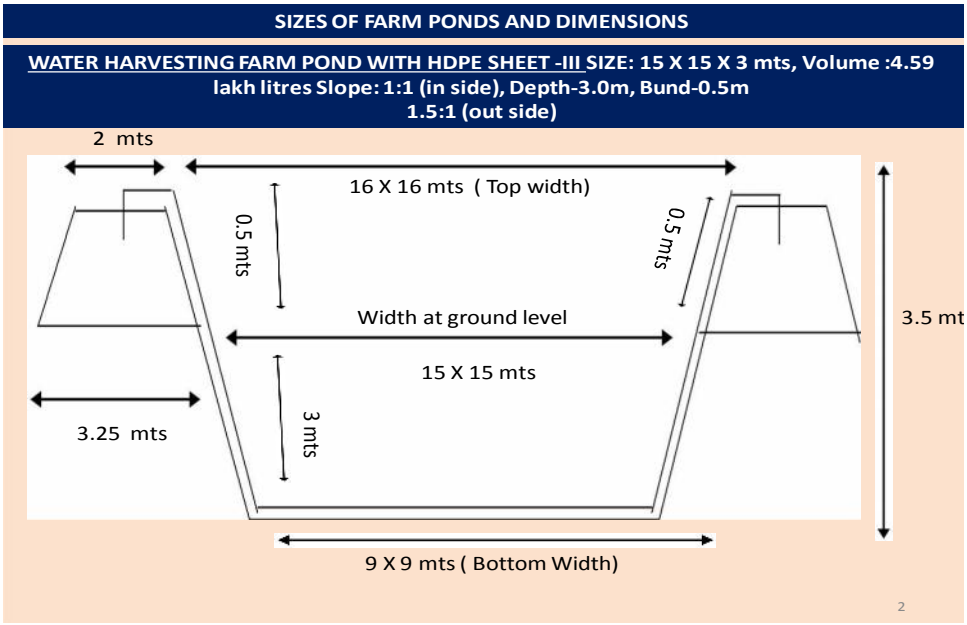
= 1360 cubic mtrs

- One cubic meter = 1000 liters of water
- Hence, the toal volume of the farm pond i.e., 14X14X4 m = 1360000 liters.
- Subsidy per one cubic meter = Rs. 62.50/-
- **Hence the total cost of the Farm pond is = Rs.1,70,000/- and the subsidy is Rs.85,000/-.**
- **The cost & quantity particulars pertaining to excavation and laying of sheet of the size of 14X14X4 m farm pond are as follows:**

Sl. No.	Estimated Quantity	Description of work	Unit	Rate inclusive of Tax in Rs.	Total Amount in Rs.
01	680	Earth work excavation in ordinary and hard gravelly soils/loose soils etc., depositing on the bank with an initial lead and lift etc., complete with trimming slopes and embankment of 2.0 mts height sectioning, banking with watering and tampering and consolidation with stone roller -2 tones or cattle treading etc., complete	One cubic meter	76.00	51680.00
02	890	Supplying reinforced HDPE 500 microns geo-membrane polythene sheet including incidental and operational charges etc., and Fixing of i.e. laying, joining of reinforced HDPE 500 microns polythene film sheet including incidental and operational charges etc., of BIS standards IS-15351:2008 /10889:2004	One square meter	120.00	106800.00
3	---	Fencing & installation of name board	--	---	**11520**
				TOTAL	**1,70,000.00**

- The fencing & name of the Board at farm pond is mandatory.
- The cost towards fencing and preparation of name Board and any other additonal cost is to be borne by the beneficiary.

3) 15x15x3m



1. Bottom width 9 X 9m
2. Width at ground level 15 X 15m
3. Top width 16 X 16m
4. Bund above Ground level 0.5m
5. Depth below Ground level 3m
6. Bund width at top 2m
7. Slope inside 1:1
8. Slope out side 1.5: 1
9. Volume = 4,59,000 lakh liters

Calculation:

$$\text{Volume} = \frac{\text{Ground surface Area + Bottam Area}}{2} \text{ X Total Depth of the pond}$$

$$= \frac{9X9+15X15}{2} X\ 3$$

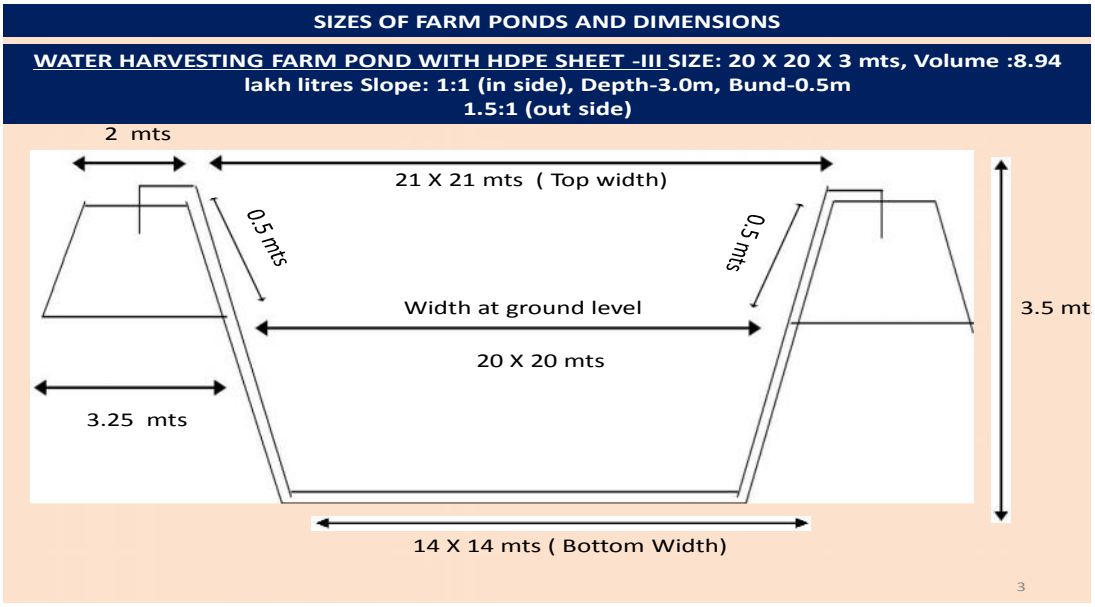
= 459 cubic mtrs

- One cubic meter = 1000 liters of water
- Hence, the toal volume of the farm pond i.e., 15X15X3 m = 4,59,000 lakh liters.
- Subsidy per one cubic meter = Rs. 62.50/-
- **The total subsidy is Rs.28,687.50/-** (as per GoI)
- **The cost & quantity particulars pertaining to excavation and laying of sheet of the size of 15X15X3 m farm pond are as follows:**

Sl. No.	Estimated Quantity	Description of work	Unit	Rate inclusive of Tax in Rs.	Total Amount in Rs.
01	490	Earth work excavation in ordinary and hard gravelly soils/loose soils etc., depositing on the bank with an initial lead and lift etc., complete with trimming slopes and embankment of 2.0 mts height sectioning, banking with watering and tampering and consolidation with stone roller -2 tones or cattle treading etc., complete	One cubic meter	76.00	37,240.00
02	460	Supplying reinforced HDPE 500 microns geo-membrane polythene sheet including incidental and operational charges etc., and Fixing of i.e. laying, joining of reinforced HDPE 500 microns polythene film sheet including incidental and operational charges etc., of BIS standards IS-15351:2008 /10889:2004	One square meter	120.00	55,200.00
				TOTAL	92,440.00

- The fencing & name of the Board at farm pond is mandatory.
- The cost towards fencing and preparation of name Board and any other additonal cost is to be borne by the beneficiary.

4) 20X20X3



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

Calculation:

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

$$= \frac{14X14 + 21X21}{2} \times 3$$

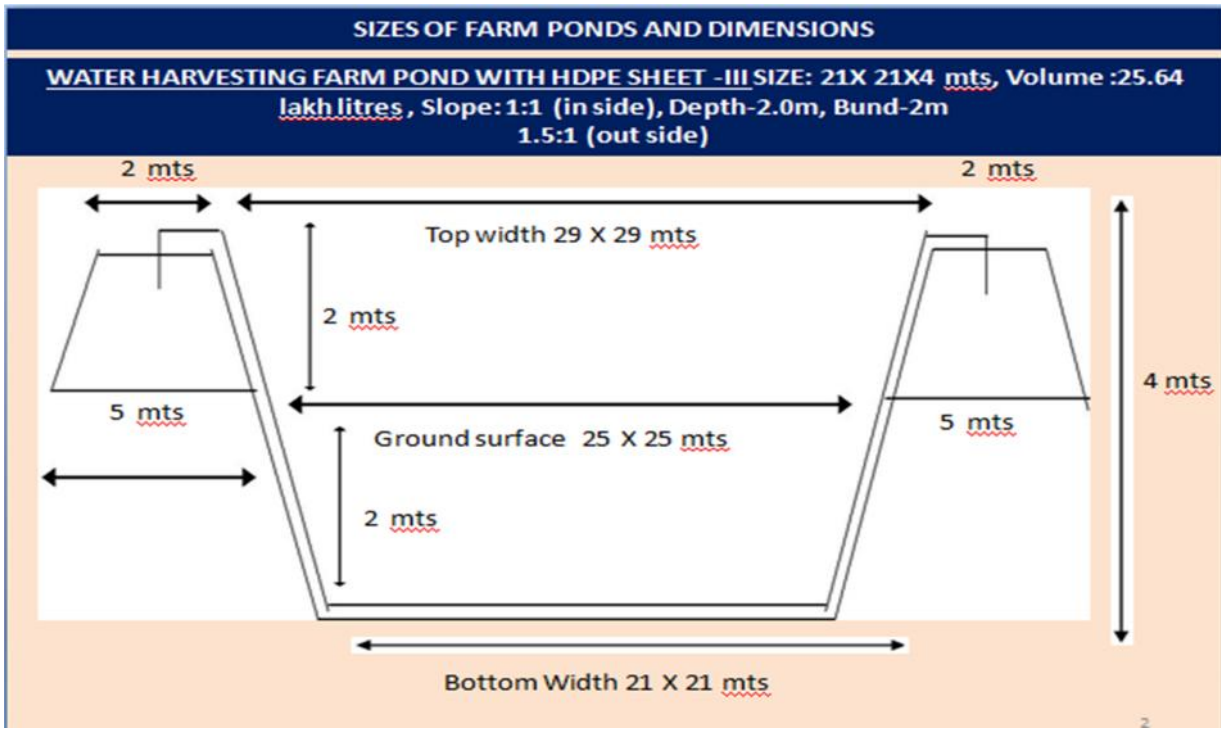
= 894 cubic mtrs

- One cubic meter = 1000 liters of water
- Hence, the toal volume of the farm pond i.e., 20X20X3 m = 8,94,000 lakh liters.
- Subsidy per one cubic meter = Rs. 62.50/-
- **Hence the total cost of the Farm pond is = Rs.1,50,000/- and the subsidy is Rs.75,000/-. (as per GOI Norms)**
- **The cost & quantity particulars pertaining to excavation and laying of sheet of the size of 20X20X3 m farm pond are as follows:**

Sl. No.	Estimated Quantity	Description of work	Unit	Rate inclusive of Tax in Rs.	Total Amount in Rs.
01	894	**Earth work excavation in ordinary and hard gravelly soils/loose soils etc., depositing on the bank with an initial lead and lift etc., complete with Trimming slopes and embankment sectioning banking with watering and tempering and consolidation with stone roller -2 tones or cattle treading etc., complete**	One cubic meter	72.00	64368.00
02	**800**	**Supplying HDPE 300 microns film sheet including incidental and operational charges etc., and Fixing of i.e. laying joining of 300 microns HDPE Polythene sheet sheet including incidental and operational charges etc., of BIS standards IS-10889:2004/10889:2004**	**One square meter**	90.00	72000.00
3	--	**Fencing & installation of name board** --	---	------	13632.00
				TOTAL	**1,50,000**

- The remaining amount must be utilized for fixing the fencing and preparation of name board at farm pond.
- The fencing& board at farm pond is mandatory.

5)21 X 21X 4m



1. Bottom width 21 X 21 m
2. Width at ground level 25 X 25 m
3. Top width 29 X 29 m
4. Bund above Ground level 2m
5. Depth below Ground level 2m
6. Bund width at top 2m
7. Slope inside 1:1
8. Slope out side 1.5: 1
9. Volume = 25,64,000 liters

Calculation:

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

$$= \frac{21X21+29X29}{2} \times 4$$

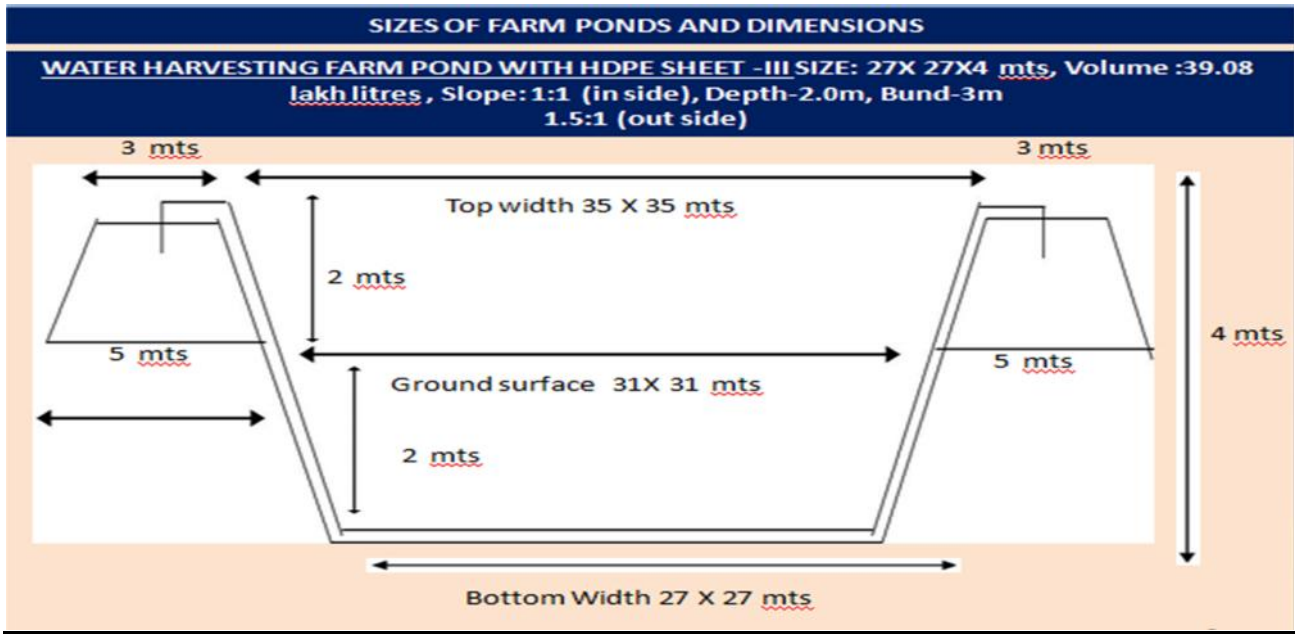
= 2564 cubic mtrs

- One cubic meter = 1000 liters of water
- Hence, the toal volume of the farm pond i.e., 21X21X4 m = 2564000 liters.
- Subsidy per one cubic meter = Rs. 62.50/-
- **Hence the total cost of the Farm pond is = Rs.3,20,500/- and the subsidy is Rs.1,60,250/-.**
- **The cost & quantity particulars pertaining to excavation and laying of sheet of the size of 21X21X4 m farm pond are as follows:**

Sl. No.	Estimated Quantity	Description of work	Unit	Rate inclusive of Tax in Rs.	Total Amount in Rs.
01	1300	**Earth work excavation in ordinary and hard gravelly soils/loose soils etc., depositing on the bank with an initial lead and lift etc., complete with trimming slopes and embankment of 2.0 mts height sectioning, banking with watering and tampering and consolidation with stone roller -2 tones or cattle treading etc., complete**	One cubic meter	76.00	98800.00
02	**1360**	**Supplying reinforced HDPE 500 microns geo-membrane polythene sheet including incidental and operational charges etc., and Fixing of i.e. laying, joining of reinforced HDPE 500 microns polythene film sheet including incidental and operational charges etc., of BIS standards IS-15351:2008/10889:2004**	**One square meter**	120.00	163200.00
03	-----	**Fencing & installation of name board**	----	------	58500.00
				TOTAL	**320500.00**

- The remaining amount must be utilized for fixing the fencing and preparation of name board at farm pond.
- The fencing& board at farm pond is mandatory to release subsdiy to farmer.

6) 27X27X4m



1. Bottom width 27 X 27 m
2. Width at ground level 31 X 31 m
3. Top width 35 X 35 m
4. Bund above Ground level 2m
5. Depth below Ground level 2m
6. Bund width at top 3m
7. Slope inside 1:1
8. Slope out side 1.5: 1
9. Volume = 39,08,000 liters

Calculation:

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

$$= \frac{27X27 + 35X35}{2} \times 4$$

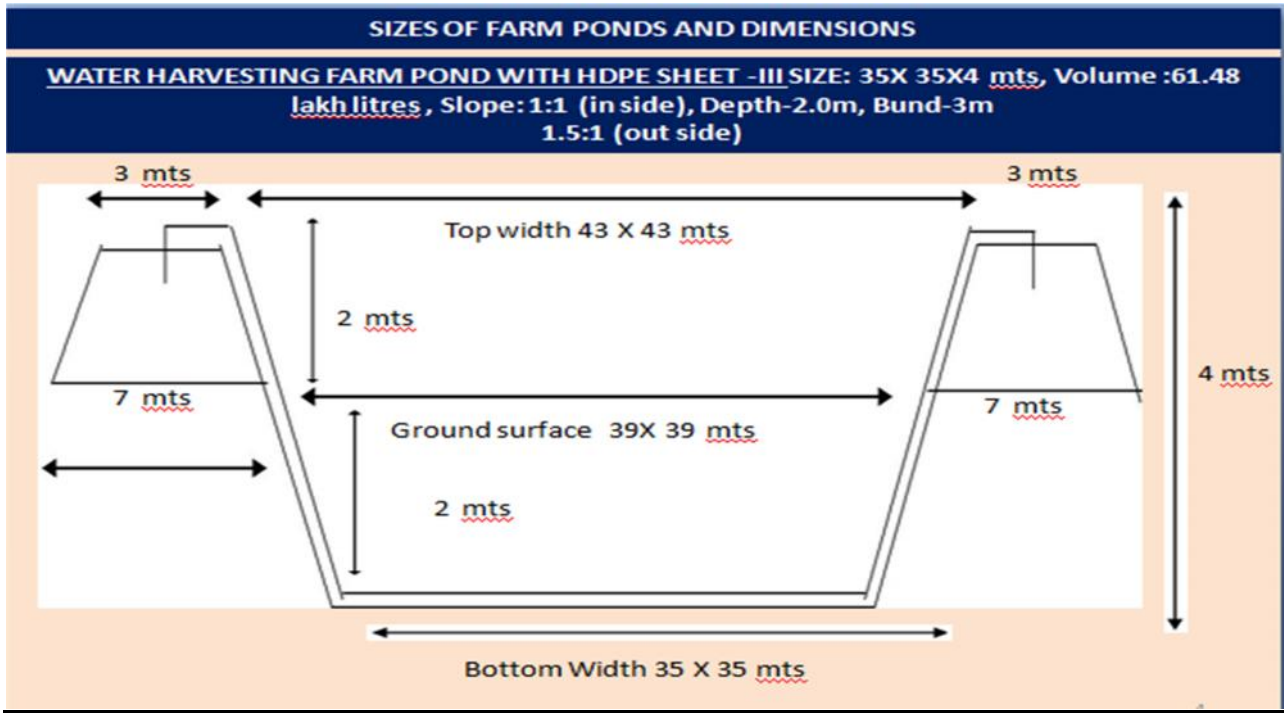
= 3908 cubic mtrs

- One cubic meter = 1000 liters of water
- Hence, the toal volume of the farm pond i.e., 27X27X4 m = 39,08,000 liters.
- Subsidy per one cubic meter = Rs. 62.50/-
- **Hence the total cost of the Farm pond is = Rs.4,88,500/- and the subsidy is Rs.2,44,250/-.**
- **The cost & quantity particulars pertaining to excavation and laying of sheet of the size of 27X27X4 m farm pond are as follows:**

Sl. No.	Estimated Quantity	Description of work	Unit	Rate inclusive of Tax in Rs.	Total Amount in Rs.
01	1954	**Earth work excavation in ordinary and hard gravelly soils/loose soils etc., depositing on the bank with an initial lead and lift etc., complete with trimming slopes and embankment of 2.0 mts height sectioning, banking with watering and tampering and consolidation with stone roller -2 tones or cattle treading etc., complete**	One cubic meter	76.00	148504.00
02	**1900**	**Supplying reinforced HDPE 500 microns geo-membrane polythene sheet including incidental and operational charges etc., and Fixing of i.e. laying, joining of reinforced HDPE 500 microns polythene film sheet including incidental and operational charges etc., of BIS standards IS-15351:2008/10889:2004**	**One square meter**	120.00	228000.00
03	------	**Fencing & installation of name board**	----	------	111996.00
				TOTAL	**488500.00**

- The remaining amount must be utilized for fixing the fencing and preparation of name board at farm pond.
- The fencing& board at farm pond is mandatory.

7) 35X35X4m



1. Bottom width 35 X 35 m
2. Width at ground level 39 X 39 m
3. Top width 43 X 43 m
4. Bund above Ground level 2m
5. Depth below Ground level 2m
6. Bund width at top 3m
7. Slope inside 1:1
8. Slope out side 1.5: 1
9. Volume = 61,48,000 liters

Calculation:

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

$$= \frac{35X35 + 43X43}{2} \times 4$$

= 6148 cubic mtrs

- One cubic meter = 1000 liters of water
- Hence, the toal volume of the farm pond i.e., 35X35X4 m = 61,48,000 liters.
- Subsidy per one cubic meter = Rs. 62.50/- .
- **Hence the total cost of the Farm pond is = Rs.7,68,500/- and the subsidy is Rs.3,84,250/-.**
- **The cost & quantity particulars pertaining to excavation and laying of sheet of the size of 35X35X4 m farm pond are as follows:**

Sl. No.	Estimated Quantity	Description of work	Unit	Rate inclusive of Tax in Rs.	Total Amount in Rs.
01	4100	**Earth work excavation in ordinary and hard gravelly soils/loose soils etc., depositing on the bank with an initial lead and lift etc., complete with trimming slopes and embankment of 2.0 mts height sectioning, banking with watering and tampering and consolidation with stone roller -2 tones or cattle treading etc., complete**	One cubic meter	76.00	311600.00
02	**2700**	**Supplying reinforced HDPE 500 microns geo-membrane polythene sheet including incidental and operational charges etc., and Fixing of i.e. laying, joining of reinforced HDPE 500 microns polythene film sheet including incidental and operational charges etc., of BIS standards IS-15351:2008/10889:2004**	**One square meter**	120.00	324000.00
03		**Fencing & installation of name board**			132900.00
				TOTAL	**768500.00**

- The remaining amount must be utilized for fixing the fencing and preparation of name board at farm pond.
- The fencing & board at farm pond is mandatory.

Note: *** The unit cost is Rs.125/- per cubic meter as per GoI norms and subsidy is 50% of the total unit cost i.e., Rs. 62.50 per cubic meter.

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 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 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 2017-18:

1. Farmers are to be sensitized and motivated by CLHSCOs/DHSO/DLHSCOs to understand the concept of farm ponds to provide life saving 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
4. SC and ST ratios shall be followed scrupulously.
5. **A slit trap should be provided at the entrance of the pond.**
6. **The sheet should not be folded while laying.**
7. **The Geo Membrance sheet with 500 microns is more effiective rather than 300 microns.**
8. The District Officer should collect the non-subsidy portion in the form of Demand draft in favour of District Officer from the concerned farmer.
9. District Officer should obtain DMC approval for the list of feasible beneficiaries identified for farm ponds.
10. After obtaining DMC approval, the DHSO/DLHSCO shall issue work order to the empanelled Agency / farmer.
11. **The excavation work can be taken up by farmer on his own or through empanelled firm but it is mandatory that the lining of the farm pond is to be taken up through empanelled firm only.**
12. **The subsidy will only be released after fixing the fencing and name board at Farm Pond.**
13. **Issuing of Work order :**
    a. **In case the beneficiary is interested to take up both excavation and laying of sheet through empanelled firm the district officers should give the work order for the both works duly collecting the non-subsidy amount. The Subsidy & Non-Subsidy will be released to the firm.**
    b. **In case the beneficiary is interested to take up excavation work on his own and laying of sheet through empanelled firm the district officer should give work order separately for laying of sheet duly collecting the Non-Subsidy amount and the subsidy amount for laying of sheet will be released empanel firm.**
    c. **In case the size of the farm pond excavated is not in concurrence with actual size, the additional amount incurred during excavation and laying of sheet is to be borne by the farmer.**
    d. **In case the beneficiary is interested to take up excavation of farm pond with RCC lining instead of laying of sheet, the subsidy will be same as Normal Farm Ponds for all sizes and the**

additional amount towards RCC lining has to borne by the beneficiary.

14. MI Engineer will take the MB record and Check measurement will Be done by Horticulture Officer.

15. Super check by DHSO/DLHSCO (10% of Target randomly).

16. 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/DLHSCO.

17. DHSO/DLHSCO will inspect the farmpond along with concerned HO and inspection report will be sent to the SHM Office by recommending for release o fsubsidy to the beneficiary.

18. The Head office will release the funds to the concerned District Officer through online after report received from the DHSO/DLHSCO with his/her recommendation for release of subsidy.

19. A Display board (Iron) of size 2'x2' ft containing the following information in Telugu should be placed near the farm pond.

20. The District Officer shall transfer the Subsidy amount through online to the accounts of the concerned beneficiaries / firms within 15 days from received head office.

21. The fencing should be done by the farmer with his own cost.

Department of Horticulture

Mission for Integrated development of Horticulture (MIDH)

Name of farmer:

Extent of land & crop:

Size of pond (m x m):

Capacity of pond (litres):

Total expenditure: Rs.

Total Subsidy: Rs.

Subsidy amount: Rs.

Non subsidy amount: Rs.

Year of sanction:

5. PROTECTED CULTIVATION (Precision Farming)

A. POLY HOUSES / SHADENET HOUSES

Objectives:

- Enhancing productivity per unit area.
- Promotion of high value Horticulture crops under poly houses/Shade Net Houses.
- Propagation of planting material to improve germination percentage and better hardening.
- Year round production of floricultural crops and off season production of vegetables & fruit crops.

Pattern of Assistance:

S.No	Item	Max permissible Cost	Pattern of Assistance
a	Naturally Ventilated Poly house	Rs.844 per sqm(>2080sqm to 4000sqm)	50% of the unit cost i.e., Rs.422.00 per sqm(maximum 4000 sqm)
	Plant material a. Carnation / Gerbera	Rs.270/- per sqm	50% of the unit cost i.e., Rs. 135 per sqm(maximum 4000 sqm)
	b. Roses	Rs.157/- per sqm	50% of the unit cost i.e., Rs. 78.75 per sqm(maximum 4000 sqm)
	c. Vegetables	Rs.140/- per sqm	50% of the unit cost i.e., Rs. 70 per sqm(maximum 4000 sqm)
	Shadenet House:		
	(a) Tubular structure	With plastic top as addition: >4.00m height - Rs.710/Sqm	50% of cost limited to 4000 Sq.m.per beneficiary.
		Dome shape; >4.00 m height – Rs. 600/sqm	50% of cost limited to 4000 Sq. m. per beneficiary.
		Flat shape-all GI; 4.0 m height – Rs. 550/sqm	50% of cost limited to 4000 Sq. m. per beneficiary.
		Flat shape-Cable purlin, 4.0 m ht. – Rs. 525/sqm	50% of cost limited to 4000 Sq. m. per beneficiary.
	(b) Wooden structure	Rs. 492/Sqm and Rs. 566/Sqm for hilly areas	50% of cost limited to 20 units (each unit not to exceed 200 Sq.m) per beneficiary.

The beneficiaries shall be given a choice to avail the assistance under MIDH(50%) or State Plan (75% /95%) with dovetailing of funds.

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.

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 does not entitle applicant to avail assistance. The application shall be considered only after submission of all the documents.
3. Farmer will apply to concerned DLHSCO/DHSO office through CLHSCO of concerned block with complete required documents as per check-list.
4. Head Office will scrutinize the cases and recommend to accord approval for release of assistance under this component.
5. DLHSCO/DHSO will issue administrative sanction letter after approval from Head Office.
6. In caseof finance by Bank, the DLHSCO/DHSO will verify the documents. If found, as per check-list and 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 DLHSCO/DHSO for the sanction of project. The date of receiving of appraisal report in PD/DD office shall be treated as first day of application and will be considered based on available targets.
8. All the cases must be entertained through online on HORTNET in case assistance is to be availed under MIDH scheme.

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 availed 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 **90 days**. Further, an extension of maximum 30 calendar days may be considered in advance in writing.

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/Firm is responsible for the erection of the Poly House / Shadenet House / inset net house.
- Erection should be carried out by the companies empanelled by the Department.
- A display board depicting "Department of Horticulture", Telangana State (Assisted Green House with logo of NHM).
- Subsidy will be released through online transfer to the beneficiary/Firm, after joint inspection by the committee members.
- 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 House flowers, vegetables, medicinal and aromatic plants, spices etc. should be considered for cultivation.
- The proposals for construction of Poly House / Shadenet house may also be implemented in project mode with credit link back ended subsidy.
- Under Shade nets the percentage of shade to be used is 35 to 75 %
- Documentation with photo graphs to be done at various stages of erection of Poly House / Shadenet 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.

VII. 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.

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

IX. Inspection: There shall be Three inspections.

a. **First Inspection**: First Inspection shall be conducted by Joint Inspection Team (JIT) from DHQ(District Head Quarters), HO &DHSO/DLHSCO or Third Party Inspection nominated by the Department just after supply of material and completion of foundation work. This inspection will be conducted after call from farmer/firm in written to DHSO/DLHSCO of the District with assurance that the material supplied as per component list and the foundation work is complete as per the departmental specifications and quantity as per design excluding cladding material. The farmer/firm will keep representative sample of all the components. The JIT may check any of the used material at site and firm has to facilitate it. In case of bankable cases joint Inspection team along with Banker shall carry out the inspection.

b. **Final inspection**: final inspection shall be conducted by JIT or Third party inspection nominated by Head of the Department after intimation to the DHSO/DLHSCO of the District after completion of structure in all respects. DHSO/DLHSCO Firm representative (if empanelled firm) farmer and Banker (in case bankable) will remain present at the time of physical inspection to be carried out.

c. **Additional Inspection**: Due to the shortcomings in structure during first/final inspection, the additional inspection if required, the firm shall bear the charges for the same. If additional inspection is due to farmer, the farmer shall bear the charges for the same accordingly. The rate shall be charged applicable at that time and is binding to all.

X.Insurance of Poly house: The insurance of Poly house is the Responsibility of farmer.

XI. Assistance of cost of cultivation: The assistance on cost of cultivation shall be released only after successful completion of Poly house and release of assistance. The farmer has to apply to concerned DHSO/DLHSCO by intimating the possession of structure and submission of training certificate and sowing of crop.

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

FORMAT – I

Recent Passport Size Photograph

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

Name of the Scheme: **Protected Cultivation**

Component: POLY HOUSE/SHADENET HOUSE/PLANT MATERIAL

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 projectDetails 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 theHorticulture Officers _____

Enclosures: DHSO/DLHSCO

1. Pattadar Pass Book/Orginal Computer pahani
2. Detailed Project Estimate
3. Soil & Water Analysis (not needed for Mulching)
4. Affidavit (not needed for Mulching)

WORK FLOW & CHECK LIST FOR DOCUMENTS TO BE SUBMITTED TO POLY HOUSE / SHADENET 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	
6	Organization of training programme / Field Visit	DISTRICT OFFICER
7	Application filling in Hortnet	Farmer / HO
8	District Mission Committee Approval	DISTRICT OFFICER
9	SLEC Approval	State MIDH cell
10	Issue of Administrative Sanction- Format – III	CoH
11	Erection of Poly House (empanelled list will be communicated)	Farmer/Firm
12	1st Joint Inspection after foundation	DISTRICT OFFICER
13	Completion & Under Taking – Format – IV	Farmer & Fabricator
14	Submission of bills & invoices	Farmer / HO
15	Constitution of Joint Inspection Committee	DISTRICT OFFICER
16	Final Joint Inspection Report - Format - V	Committee Members
17	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.	DISTRICT OFFICER
18	Uploading the bills and field photos in Hortnet	DISTRICT OFFICER
19	Release of subsidy to the beneficiary through online transfer (Hortnet)	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 NHM.

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

PROCEEDING OF THE DISTRICT COLLECTOR, DISTRICT

Present :

Proce.No. State Cell-I/ G.H / / 2017, Dt. 2017.

Sub:- Horticulture Dept- ..... District – State Cell – 2017-18 – Construction of Poly Houses under Protected Cultivation – Administrative Sanction Orders - Issued.

Ref: 1. Annual Action Plan 2017-18.

2. **Application of Sri..... S/o. .....,** **.....(V), ...(M),.....**District received through **H.O., ...,**

3. Note Approved by the District Collector, ...Dist. **Dt.** **.....**

&&&

ORDERS:

Sri....., S/o. ....., ...(V), ...(M), ... DISTRICT Sy.No.....,he has been selected as beneficiary for Construction of Poly House under Protected Cultivation of State Horticulture Mission -2017-18 for **.....Sqmt** and the eligible subsidy is 50% of the total Cost subject to a maximum limited to 4000 Sqmts for each beneficiary.

In view of the above, Administrative sanction is hereby accorded to you for Construction of Poly House under Protected Cultivation under State Horticulture Mission -2017-18for the construction of **....., Sqmt** and the eligible subsidy is 50% of the total Cost subjective a maximum limited to 4000 Sqmts for the beneficiary duly following the conditions furnished here under to release subsidy by the Department of Horticulture.

The subsidy will be released subject to the following terms & conditions:-

1. The farmer should follow the Technical Specification for construction of Poly House under Protected Cultivation issued by the MIDH as follows.
2. The farmer should display the board and place in front of the Poly house. The Logo of MIDH and the matter mentioned below.

Financial Assistance by MIDH/Department of Horticulture

TELANGANA STATE

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

3. The farmer should obtain a certificate undertaking with the following matter from Poly House fabricated firm "Certified that the material supplied and Construction of Poly house is as per the guidelines and standard fixed by the MIDH and the area constructed in ---------- Sqmts in the field of Sri/ Smt_____ S/o, W/o. _____ in _____ Village of _____ Mandal of _____ DISTRICT. "
4. The farmer should submit affidavit on Rs. 100/- Stamp Paper with notary about the Poly House constructed by him (Copy enclosed).
5. The beneficiary should undergo 7 days training as per the Schedule given by the DHSO/DLHSCO.
6. Farmer is responsible for the installation of the Poly House and for the payment to the fabricator.
7. After completion of work, the subsidy will be released to the farmers based on the recommendation of DHSO/DLHSCOalong with the Joint Inspection team certificate.
8. Subsidy will be released through online transfer to the beneficiary through the DHSO/DLHSCO, after joint inspection by the committee members.

(APPROVED BY THE DISTRICT COLLECTOR, ...DISTRICT)

Project Director/Deputy Director

..... DISTRICT.

To
Sri..... S/o. ....., ..., (V), ..., (M)
..... DISTRICT
Copy to Horticulture Officer,....., ,..... DISTRICT

Format - IV

Dt: 2017

To
DHSO/DLHSCO
..... 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. :

Constitution of Joint Inspection Committee for Poly House/ Shade net House & Planting Material (Flowers & Vegetables) under Protected Cultivation:-

DLHSCO/DHSO shall organize Joint inspection of the Poly House / Shadenet House duly constituting a committee with the following members for approval of state cell:

1. DLHSCO/DHSO
2. Horticulture Officer (Concerned)
3. MI Engineer.
4. Banker (in case of bankable project).

The joint inspection report should be sent in format with all necessary certifications. If any of the committee members has not attended the inspection, DHSO/DLHSCO shall give reasons for not attending the joint inspection.

Format – V

FORMAT TO CONDUCT FINAL AND JOINT INSPECTION OF POLY HOUSE / SHADENET HOUSE BY THE COMMITTEE UNDER PROTECTED CULTIVATION COMPONENT OF MIDH THROUGH STATE HORTICULTURE MISSION OF TELANGANA STATE

Name of the Component : POLY HOUSE / SHADENET 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

Note : Separate Joint inspection report has to be furnished HO wise for Poly House / Shadenet House.

Certificates:

1) This is to certify that the above farmer has installed Poly House / Shadenet House under Protected cultivation 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. _____/- may be released to the said beneficiary

Promoter Project Engineer HO DLHSCO/DHSO

B. Planting Material

Cost of Planting Material of High Value Vegetables & Flowers grown in Poly Houses / Shade net house

Cultivation of High value Vegetables & Flowers is cost intensive hence provision is made for meeting the cost of cultivation under Poly Houses & Shade net houses which includes cost of planting material and inputs.

Terms & Conditions:

- Assistance should be extended for High value flowers and vegetables under Poly houses.
- Preference may be given to the farmers who have availed assistance for erection of Poly House under MIDH.
- DMC approval has to be obtained for the identified beneficiaries.
- Subsidy will be released through online transfer after joint inspection by the committee members and also uploading the bills and field photos in Hortnet.
- **In case if the same farmer utilizes both the subsidies under Poly House and Cost of Planting material, a display board depicting logo of NHM and "Department of Horticulture" & MIDH assisted Poly House with planting material should be displayed. If the farmer has erected Poly House without any assistance from MIDH then the board should depict logo of MIDH assisted planting material.**
- Documentation through photo graphs at the time of planting and at the time of harvesting.
- Photographs should clearly depict the unit, plant material grown, Display board, farmer and all members of joint inspection team.
- The District officer should send DMC approval to Head office for releasing financial assistance.

Indicative cost for Cultivation of Flowers & Vegetables under Poly Houses Recommended by the State Level Technical Committee (SLTC):

Sl. No	Crops		Total Unit Cost (Rs. /Sq.mtr)	Pattern of Assistance (Rs./ Sq.mtr)
1	Vegetables	Capsicum	Rs. 140/-	50% of cost limited to 4000 sq.mtr per beneficiary
		Tomato	Rs. 140/-	
2	Flowers	Rose	Rs. 157.50/-	50% of cost limited to 500 sq.mtr per beneficiary
		Gerbera	Rs. 270/-	50% of cost limited to 4000 sq.mtr per beneficiary
		Carnation	Rs. 270/-	

Component wise indicative cost of planting material and input of high value vegetables grown in poly houses: (500 sq.mtrs)

S. No.	Description	Amount	Unit Cost
1	Bed Preparation & Seed / Plant Material	20000	Rs.140/- Sq.Mt.
2	Trellies	8500	
3	Fertilizers	20000	
4	PP Chemicals	8500	
5	Mulching	6000	
6	Labour cost (Weeding, Pruning, Training)	7000	
		70000	

The HO/DHSO/DLHSCO should obtain required documents / bills for all the above components for release of assistance.

Component wise indicative cost of planting material and input of flowers for poly houses

S. No.	Description	Rose for 3500 plants in 500 Sq.mts.	Gerbera for 3500 plants in 500 Sq.mts.	Carnation for 10000 plants in 500 Sq.mts.	Orchid & Anthurium for 4000 plants in 500 Sq.mts.	Unit Cost (Rs. /Sq.Mt) As per recommendation by SLTC
1	Plant material	100000	110000	100000	155000	For Rose Rs.157.50/- Sq.mt. For Gerbera & Carnation Rs.270/- Sq.Mt for Orchid & Anthurium Rs. 700/- sq.mtr (as per MIDH guidelines)
2	Bed preparation	15000	15000	15000	15000	
3	Manures & Fertilizers	31500	50000	55000	50000	
4	Plant protection chemicals	31500	50000	55000	50000	
5	Pruning Harvesting	20000	40000	40000	40000	
6	Intercultural operations	15000	40000	40000	40000	
	Total	**213000**	**305000**	**305000**	**350000**	

The HO &DHSO/DLHSCOshould obtain required documents / bills for all the above components for release of assistance.

WORK FLOW & CHECK LIST FOR DOCUMENTS TO BE SUBMITTED FOR AVAILING SUBSIDY FOR PLANTING MATERIAL

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	Pattadar Pass Book Copy	
4	Registration in hortnet	HO/Farmer
5	District Mission Committee Approval	District Officer
6	Issue of Administrative Sanction	District Officer
7	Planting	Farmer
8	Submission of bills / invoices	Farmer / HO
9	Constitution of Joint Inspection Committee	District Officer
10	Joint Inspection Report – Format -V	Committee Members
11	Sending of joint inspection report to State office for release of Subsidy	District Officer
12	Obtaining DHM approval for sanction and release of assistance	District Officer
13	Uploading the field photos and bills in Hortnet	District Officer
14	Online transfer of assistance to beneficiary	State MIDH Cell

Format – VI

FORMAT TO CONDUCT FINAL AND JOINT INSPECTION OF COST OF PLANT MATERIAL AND INPUT OF FLOWERS & HIGH VALUE VEGETABLES BY THE COMMITTEE UNDER PROTECTED CULTIVATION COMPONENT OF MIDH THROUGH STATE HORTICULTURE MISSION OF TELANGANA.											
Name of the Component :											
Sl. No.	**Name of the Farmer & Address**	**Cate gory**	**Village**	**Mandal**	**Survey No.**	**Area in Sq.mtrs.**	**Crop**	**No. of Plants**	**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	12

Note : Separate Joint inspection report has to be furnished HO

Certificates:

1) This is to certify that the above farmer has planted flowers / high value vegetables.

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. _____/- may be released to the above beneficiary.

FARMER **HO** **DLHSCO/DHSO**

6. INTEGRATED POST HARVEST MANAGEMENT

Specific programmes which would be taken up under MIDH would include establishment of pack houses, cold storage units, supply of refrigerated vans, primary/mobile processing units, ripening chambers. All these projects will be entrepreneur driven through commercial ventures for which Governmental assistance will be credit linked back-ended.

Subsidy in accordance with the cost norms given to PSUs and State Government agencies, Cooperatives, growers' association, farmers group, self-help groups, women farmers groups, recognized/registered by the DMCs, having at least 25 members, will also be entitled to avail assistance for such activities to the same extent. However, assistance will not be credit linked for such agencies but would be back ended subject to condition that they are able to meet their share of the project cost.

Assistance for setting up of new cold storage/ CA Storage/ MA storage will be available only to multi-chamber cold storage units with latest/new technologies, which are energy efficient with provision for insulation, humidity control, advanced cooling systems etc., having specifications and standards approved by the Ministry as detailed in the website. www.nhm.nic.in / www.midh.gov.in -> revised guidelines -> technical standards for cold storages

STEPS TO BE FOLLOWED IN GENERAL:

1) **At the time of receiving the proposal from promoter at the DLHSCO/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 DLHSCO/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 DLHSCO/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) After receipt of all documents DHM approval has to be obtained.

5) The DLHSCO/DHSO should forward the project proposals in 3 sets (Cold Storages / Ripening Chambers / Primary Processing units / Reefer Vans) along with the check list duly signed by the DLHSCO/DHSO. If any documents are not submitted proper justification has to be given for not submitting the documents.
6) As the bank consent letter, bank appraisal report and affidavit are most essential documents, the DLHSCO/DHSO should verify these documents with originals and DLHSCO/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) Preliminary inspection report in the prescribed format has to be submitted by DLHSCO/DHSO along with bank disbursement statement to state cell for release of subsidy.
2) Periodical inspection at different stages of execution.
3) DLHSCO/DHSOs have to give confirmation regarding the suggestions / remarks given by the technical consultant in techno economic viability report.
4) DLHSCO/DHSOs 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) DLHSCO/DHSO has to forward the energy audit report to State cell and should recommend for constitution of joint inspection team.

4) Joint Inspection

1) It is the responsibility of the DLHSCO/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 DLHSCO/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 / DLHSCO/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.	Preliminary inspection report uploading in Hortnet recommending release of 1st installment	Within one week after issue of administrative sanction
10.	Periodical inspection by DLHSCO/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)	
11.	DLHSCO/DHSO to recommend for constitution of joint inspection	Within 3 days after completion of the project in all aspects
12.	After joint inspection team is constituted DLHSCO/DHSO to coordinate with all the members and arrange for joint inspection	Within 7 days after constitution of joint inspection.
13.	Submission of joint inspection report	Within 3 days after completion of joint inspection
14	Uploading the bills and photos in hortnet for release of subsidy	Within 3 days after completion of joint inspection

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
2	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.
3	Ripening chamber	Rs. 1.00 lakh/MT. (max 300 MTs per beneficaiy)	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.
4	Refrigerated Transport vehicles	Rs. 26.00 lakh for 9 MT (MIDH & HMNEH)	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.

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 DLHSCO/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 DLHSCO/DHSO shall see that data logger / PLCs are installed by the promoter as mentioned in technical standards
- As the following documents are mandatory the DLHSCO/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 DLHSCO/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 DLHSCO/DHSO with all the above required documents shall be forwarded to the technical consultants for Techno economic Viability study.
- The project proposals that are economically and technically viable shall be placed before the SLEC for approval.
- The project proposals that are approved by the SLEC shall be forwarded to the MIDH for placing in the EC for approval.
- In principal Sanctions shall be issued to the projects that are sanctioned by the EC.
- The DLHSCO/DHSOs after receiving the In principal sanctions, shall inspect the site and submit the preliminary report in the Format-IX (B)/CS/RC mentioning the status and progress of the project work duly recommending for the release of 1st installment subsidy to the concerned bank.
- DLHSCO/DHSO should also upload the preliminary report and photos in Hortnet for release of credit linked back ended subsidy.
- Basing on the preliminary report of the DLHSCO/DHSO concerned the State cell shall release 1st installment subsidy to the concerned bank of the promoter through HORTNET.
- **DHSO/DLHSCO should ensure that promoters shall allow 20% of horticulture produce of the concerned district farmers.**
- After completion of the project and energy audit, the DLHSCO/DHSO shall recommend through a letter for joint inspection of the project along with bank disbursement statement / completion letter from Banker duly enclosing the energy audit report.
- After obtaining permission from state office, the DLHSCO/DHSO shall conduct Joint Inspection with the following committee members:

1. Commissioner of Horticulture / Sr. Officer from Head Office.
2. TSG Member / Scientist from DATT centre.
3. Dy. Director of Horticulture (Concerned)
4. Assistant Director of Horticulture concerned.
5. Horticulture officer concerned.
6. Banker
7. Promoter
8. Representative from NABCONS.

The committee shall submit Joint inspection report in the prescribed Format for Cold Storage and Ripening Chamber along with the original company bills of purchase of the project machinery.

DLHSCO/DHSO shall upload the bills and photos in HORTNET for release of 2nd installment of subsidy. Based on the recommendations of the Committee, the final installment of the subsidy shall be released to the concerned bank of the promoter.

A. COLD STORAGE UNITS

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.

Cold Storage unit Type 2: Are cold stores with more than 6 chambers, each chamber of less than 250 MT in capacity, with each chamber having independent room based controls and refrigeration so as to make them capable of serving at differing temperature zones, suitable for storing multiple temperature type commodities. Each chamber is designed for unitized load handling with basic material handling equipment and construction is normally seen to be of modern PEB type with composite panels. These types of stores are primarily designed for short term storage, used as distribution hubs for packaged and ready to retail produce, as front ends market links as part of the cold-chain. Such stores will have large temperature controlled anterooms (non-storagearea) designed to handle under roof traffic for multiple receipt and dispatch operations and will additionally have basic material handling equipment such as pallet lifts, fork lifts, etc. This type of cold store construction is also used for modern farm-gate storage of perishables and where applicable can also apply for certain add-on technologies to make some chambers capable of controlled atmosphere (CA enabled) storage.

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.

The applicable support to both types of cold stores is as follows:

Credit Linked back-ended

Subsidy 35% of project cost (general areas); 50% in Hilly and scheduled areas	Cold Store Type 1: Basic, large chambers (of >250 MT each) for single product storage / temperature zone	Rs.8000/MT for max capacity 5000MT (NHM)
		Rs. 7600/ MT for capacity 5001 to 6500 MT *(NHB)*
		Rs.7200/MT for capacity 6501 to 8000 MT *(NHB)*
		Rs. 6800/MT for capacity 8001 to 10000 MT *(NHB)*

Credit Linked back-ended

Subsidy 35% of Project cost (general areas): 50% in Hilly and scheduled areas	Cold Store Type 2: multi- product use, >6 chambers (of <250 MT each) for various product types with basic material handling equipment	Rs.10000/MT for max capacity *(NHM)*
		Rs.9500/ MT for capacity 5001 to 6500 MT *(NHB)*
		Rs.9000/MT for capacity 6501 to 8000 MT *(NHB)*
		Rs. 8500/MT for capacity 8001 to 10000 MT *(NHB)*

Annexure-I

CHECK LIST FOR PROJECTS FOR COLD STORAGE & RIPENING CHAMBER

Sl. No.	DESCRIPTION	REMARKS
1	Application Form (Format – I)	
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 / MSME certificate	
11	Fire Department approval with Drawings	
12	Pan Card Xerox Copy	
13	Electricity approval	
14	KYC documents of all the partners	
15	VAT / CST REGISTRATIONS	
16	Land Conversion	
17	DMC Approval (District Mission Committee)	
18	Affidavit on Rs.100/- stamp Paper (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	

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 Asst. Director of Horticulture _____.

DHSO/DLHSCO

Note: Synopsis to be enclosed

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 DLHSCO/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 _____ 2017 in the presence of the following witnesses;

WITNESSES:

1.

(Sign of the Consultant)

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 – IV (A) (CS)

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/ Joint Individual/Partnership Firm/ Company.	:	
E	(i). Proposed Activity	:	Cold Storage
	(ii). Type	:	
	(iii). Proposed type of cooling system	:	
F	Name of the Promoter	:	
G	**<u>Present physical status of the project :</u>**		
	I. Construction started or not	:	
	(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		

Promoter HO DLHSCO/DHSO (Concerned)

Format – IV (B) (CS)

PRELIMINARY 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/ Joint Individual/Partnership Firm/ Company.	:	
E	(i). Proposed Activity	:	Cold Storage
	(ii). Type	:	
	(iii). Proposed type of cooling system	:	
F	Name of the Promoter	:	
G	**<u>Present physical status of the project :</u>**		
	I. **Construction started or not**	:	
	(i) . Land development status/boundary/road	:	
	(ii). Connecting road to the plot	:	

(iii). Stage of cold store building civil/pre engineered as on inspection date. :

(iv). Type of produce to be stored

H **Bank Details :**

7. Bank Name :
8. Branch :
9. Bank Sanction Date :
10. Loan Account No :
11. Bank disbursement statement with A/c. No. : :
12. 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 **HO** **DLHSCO/DHSO(Concerned)**

Format – V (A) (CS)

COMPONENT WISE RELEASES MADE BY THE BANKER FOR COLD STORAGE

Name of the Firm **:**

District **:**

Place **:**

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 (B) (CS)

FORMAT TO CONDUCT FINAL AND JOINT INSPECTION BY THE COMMITTEE 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:					

- 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.

<u>Certificates:</u>

9. This is to certify that the promoter has established cold storage as per the norms of the MIDH.
10. This is to certify that the promoter has fulfilled all the observations made in the tech. viability report.

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

12. An amount of Rs._____ may be released in to the subsidy reserve fund account bearing no:---------, IFSC Code:------ Bank:----------, Branch:---------- towards 2nd& final installment.

Promoter HO TSG Member/ Local Scientist from DATT Centre

Banker Member from NABCONS DLHSCO/DHSO(Concerned)

Format – V (C) (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.)**	6000				
Total Eligible Subsidy (40% of cost)						**40% of (Capacity X per MT)**					

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

Certificates:

9. This is to certify that the promoter has established cold storage as per the norms of the MIDH.
10. This is to certify that the promoter has fulfilled all the observations made in the tech. viability report.
11. This is to certify that the project is eligible to avail subsidy of Rs. _____
12. An amount of Rs._____ may be released in to the subsidy reserve fund account bearing no:---------, IFSC Code:------ Bank:----------, Branch:---------- towards 2nd and final installment.

Promoter HO TSG Member/ Local Scientist from DATT Centre

Banker Member from NABCONS DLHSCO/DHSO(Concerned)

FORMAT- V - (D) (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		

Promoter HO Technical Consultant/ Local Scientist from DATT Centre

Member from NABCONS DLHSCO/DHSO

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	Lighting load			

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 (°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(°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(°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* (°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**

B. RIPENING CHAMBERS/ UNITS

Background Facts

It is also noticed that ripening chambers which are being set up under various schemes of horticulture development, do not DLHSCO/DHSO to appropriate technical standards. Main shortcomings noticed are as follows-

- Inadequate building design;
- Use of inadequate / unreliable insulation material with insufficient K 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 standardi n respect of modern, pressurised fruit ripening units which are given infollo wing chapter.

I. Technical Parameters for Pressurized Ripening Chamber

Unless specifically otherwise mentioned, all the applicable latestcodes and standards published by the Bureau of Indian Standards and all othe r 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,h owever, wherever IS code is not available, relevant standard codes of ASM E /ASHRAE / IIAR or other International Codes are to be followed. Latest revisions will be followed in all cases. Even for Ripening of Fruitsand Veg etables' the process as recommended by IS Standards (e.g. IS11977 of 19 87 for ripening of green banana) or as per InternationalStandardsshould be followed. For further guidance, following technical parameters may be followed:

Storage capacity of ripening chamber may depend on fruits to b e ripened & stacking and air-flow system. In this context, banana ma y be taken as reference crop for calculation of storage capacity for a gi ven volume of storage space.

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	VAT / CST 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	

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 Asst. Director of Horticulture _____.

DHSO/DLHSCO

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 DLHSCO/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 _____ 2017 in the presence of the following witnesses;

WITNESSES:

1.

(Sign of the Consultant)

Format –IV (A) (RC)

RIPENING CHAMBERS

Preliminary (Inspection Report) while submitting 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/ Joint Individual/Partnership Firm/ Company.	:	
E	(i). Proposed Activity	:	Ripening Chamber
	(ii). No of Chambers	:	
F	Name of the Promoter	:	
G	**<u>Present physical status of the project :</u>**		
	I. Construction started or not	:	
	(i) Land development status/boundary/road		

(ii) Connecting road to the plot :

(iii) Stage of Ripening Chamber building civil/pre engineered as on inspection date :

(iv) Type of produce to be Ripened :

Promoter **HO** **DLHSCO/DHSO (Concerned)**

Format – IV (B) (RC)

PRELIMINARY 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/ Joint Individual/Partnership Firm/ Company.	:	
E	(i). Proposed Activity	:	Ripening Chamber
	(ii). Type	:	
	(iii). Proposed type of cooling system	:	
F	Name of the Promoter	:	
G	**<u>Present physical status of the project :</u>**		
	I. **Construction started or not**	:	
	(i) . Land development status/boundary/road		

(ii). Connecting road to the plot :

(iii). Stage of cold store building civil/pre engineered as on inspection date. :

(iv). Type of produce to be stored : :

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.

HO **DLHSCO/DHSO (Concerned)**

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

RIPENING CHAMBER **Format – V (A) 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)

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

Certificates:

1) This is to certify that the promoter has established Ripening Chamber as per the norms of the MIDH.
2) This is to certify that the Ripening Chamber is eligible to availed subsidy of Rs.
3) An amount of Rs. May be released as II spell

Promoter **Banker** **HO** **DLHSCO/DHSO**

TSG (Member) / Local Scientist from DATT **Sr. Officer**

Member from NABCONS

RIPENING CHAMBERS **Format – V (B) - 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 TSG Member/ Local Scientist from DATT Centre

Banker Member from NABCONS DLHSCO/DHSO(Concerned)

CALCULATION SHEET FOR RIPENING CHAMBER **Format – V (C) - RC**

Name of the Ripening Chamber : **M/s.**
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 : Rs. In Lakhs.											

Promoter **HO** **TSG Member/ Local Scientist from DATT Centre**

Banker **Member from NABCONS** **DLHSCO/DHSO(Concerned)**

RIPENING CHAMBER

Format –V (D) -RC

- 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 TSG Member/ Local Scientist from DATT Centre

Banker Member from NABCONS DLHSCO/DHSO(Concerned)

C. Reefer Vans

In order to establish cold chain there is need to promote reefer vans to prevent post harvest losses. The application (Format – I) with detailed project report along with all required documents as per the check list (Annexure-II) has to be forwarded to State cell. DLHSCO/DHSO should fill the application form in hortnet. In case of refer vans and containers following documents needs to be attached to the application form to be send along with the joint inspection report as detailed below.

(a) Copy of proforma invoice of chassis, body and refrigeration units of the vehicles duly confirmed by the lending bank (to be attached to the project proposal).

(b) Copy of the payment receipts of chassis, body and refrigeration unit etc. of the vehicles duly confirmed by the lending bank (to be send along with joint inspection report).

(c) Copy of the delivery challans of the body and chassis of the vehicles (to be send along with joint inspection report).

The DLHSCO/DHSO has to recommend for the joint inspection of the reefer van after completion of the following:

i) Fabrication of the van is to be completed

ii) The van should be painted with logo of MIDH and assisted by department of horticulture and MIDH.

The DLHSCO/DHSO shall conduct joint inspection with the members constituted by this office and the joint inspection reports have to be submitted in format (RV-XVIII & XIX).DLHSCO/DHSO should upload the bills/invoices and photos in hortnet for release of subsidy. Based on the recommendations of the Committee, the final installment of the subsidy shall be released to the concerned bank of the promoter through HORTNET.

FINAL JOINT INSPECTION REPORT OF REEFER VAN

Format - I - RV

Sri. _____, S/o. _____, R/o. _____ has purchased refrigerated van (reefer van) for transport of horticulture produce as per technical specifications of MIDH with refrigeration unit of Make _____ with model no. _____ with capacity _____ with vehicle registration no _____.

Sri. _____ is eligible for Rs. _____/- towards purchase of reefer van. It is certified that the van was displayed with logo of MIDH and also written as "THE FINANCIAL ASSISTANCE GIVEN BY DEPARTMENT OF HORTICULTURE & MIDH" on the van. The vehicle purchase bills were verified.

It is recommended to release subsidy of Rs. _____/- to Sri. _____.

Promoter **HO** **TSG Member/ Local Scientist from DATT Centre**

Banker **Member from NABCONS** **DLHSCO/DHSO(Concerned)**

Format – II (RV)

COMPONENT WISE RELEASES MADE BY THE BANKER (REEFER VAN)

Name of the Firm :

District :

Place :

Account No :

(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 vehicle					
2.	Cost of the refrigeration unit & container					
3.	Cost of fabrication					
4.	Others					
	Total:					

Bank Manager /

Representative (Field Officer)
With Seal

D. 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. Potential Villages are to be identified.

2. The installation of Pre- Fabricated Pack house should be done by the empanelled firm approved by the TS Agros for the year 2017-18.

3. 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.

4. 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.

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

6. The selected farmers shall be explained the package of practices to be adopted under scheme with literature.

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

8. 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.

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

10. 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.

11. 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.
12. The DHSOs/DLHSCOs 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.

13. Joint inspection team to be constituted for Pre- fabricated pack houses:

a) In respect of the Joint inspection, the DHSO/DLHSCO 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 / DLHSCO
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/DLHSCO shall take up 50% random inspection of the established Pre- Fabricated Pack houses and also shall monitor the status of Pre- Fabricated pack houses sanctioned.

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/DLHSCO**

7. Establishment of Market Infrastructure:

Objective:

To avoid involvement of middlemen and to create a platform for getting better and remunerated prices to the farmers and fresh produce to the consumers from the Department.

Pattern of Assistance:

S.No	Particulars	Max permissible Cost	Pattern of Assistance
1	Rural Primary Market	Rs.25.00 Lakhs	40% subsidy i.e., Rs. 10.00 Lakhs. (upto 1 Acre)

List of components to be installed in the Rural Primary Markets.

1. Office Building
2. Auction/drying platforms two to three per marker
3. Water supply & sanitary arrangements as per requirement
4. Grading equipment
5. Weighing equipment
6. Wastage disposal system
7. Boundary wall and internal roads

- The targets were communicated to the DHSO- Ranga Reddy & DLHSCO-Medchal accordingly they have identified Government lands to implement the scheme.
- The detailed guidelines shall be communicated shortly.

8. Special Interventions

i. Solar cold rooms (5MTs)

ii. Enhance value chain in Turmeric in Nizamabad Cluster which includes Erstwhile Nizamabad, Karimnagar, Warangal & Adilabad Districts

a. Value chain survey
b. Bed Raisers for Bed preparation for Turmeric crop cultivation
c. Tarpaulin Sheets (6m X 8m)
d. Transplanters
e. Turmeric Boiling units for Primary processing
f. Turmeric Polishing machines for primary processing

GENERAL GUIDELINES FOR SELECTION OF BENEFICIARIES FOR COMPONENTS UNDER SPECIAL INTERVENTIONS

i. SOLAR COLD ROOMS:

S.No	Item	Max permissible Cost	Pattern of Assistance
1	Solar Cold Rooms	Rs. 15.00 lakhs per unit (5MTs)	50% of the total cost i.e., Rs. 7.50 lakh/unit

1. 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 by the TS Agros for the year 2017-18.
4. In case the beneficiary is interested to take loan from the Bank for purchase of solar cold room then he 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. In case the beneficiary is interested to purchase solar cold room on his own and then subsidy will be released to the farmer/firm based on the joint inspection report of the District. (Subsidy has to pay by the farmer)
6. The farmer/entrepreneur should inform the completion of the project to the concerned DHSO/DLHSCO 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/DLHSCO, 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 etc.,

13. Mission Director & Commissioner 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.

बागवानी मिशन
Horticulture Mission

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)

- The proposals shall be sent along with the 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.
- 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.

- 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																	

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 ftx 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

SOLAR COLD ROOM

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/DLHSCO**

ii.Enhance value chain of Turmeric in Nizamabad cluster

a. Value chain survey: Details will be communicated shortly

b. Bed Raisers for Bed preparation for Turmeric crop cultivation:

Bed Raisers for Bed preparation for Turmeric crop cultivation under Nizamabad belt includes erstwhile Nizamabad, Karimnagar, Warangal & Adilabad Districts.

Sl.No	Component	Total Cost in Rs.	Pattern of Assistance
1	Bed raisers for Turmeric Crop	Rs. 70,000/- per Unit	50% subsidy i.e., Rs. 35,000/- for all categories (Gen, SC & ST)

- Purchase of Bed Raisers should be from the empanelled firms approved by the TS Agros for the year 2017-18.
- Preference should be given to the SC, ST & Women categories beneficairies
- 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.
- 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.
- 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																	

c. TARPAULIN SHEETS 250 GSM (6m x 8m):

Sl.No	Component	Total Cost in Rs.	Pattern of Assistance
1	Tarpaulin Sheets	Rs. 2,500/- per sheet	50% subsidy i.e., Rs. 1,250/- per sheet for all categories (Gen, SC & ST) Maximum 2 sheets per beneficiaries

- Purchase of Tarpaulin Sheets should be from the empanelled firms approved by the TS Agros for the year 2017-18.
- Preference should be given to the SC, ST & Women categories beneficiaries
- Each beneficiary is eligible for 2 sheets.
- 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.
- 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																	

d. TRANSPLANTERS:

Sl.No	Component	Total cost in Rs.	Pattern of Assistance
1	Transplanters	Rs. 3500/- per unit	50% subsidy i.e., Rs. 1,750/- per unit for all categories (Gen, SC & ST)

- Purchase of Transplanters should be from the empanelled firms approved by the TS Agros for the year 2017-18.
- Preference should be given to the SC, ST & Women categories beneficairies
- 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.
- 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																	

e. TURMERIC BOILING UNITS FOR PRIMARY PROCESSING:

1. Purchase of Turmeric Boiling units should be from empanelled firms approved by the TS Agros for the year 2017-18.
2. The farmer/entrepreneur should inform the completion of the project to the concerned DHSO/DLHSCO in writing along with photograph.
3. Joint inspection team should ensure that fabrications of unit is done through empanelled firm approved by the Agros.
4. The committee consisting DHSO/DLHSCO, 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.
5. The promoters of the unit shall give extensive publicity about functioning of the facility among horticulture growers to enable them to utilize the facility.
6. A self declaration to be taken from concerned farmer that unit will not be misused and shall be enclosed with the joint inspection report.
7. The unit must contain 4 cooking chambers and one water boiling unit as per the project report submitted.
8. DHSO/DLHSCO to assign specific number on boiling drums base plate & drums of Turmeric Boiling units such as SHM/TBU/2017-18/concerned District/Serial no of the District
9. The promoter should not engage any child labour in the unit.
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 etc.,

13. Mission Director & Commissioner 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 Turmeric Boiling unit, The Logo of Mission for Integrated Development of Horticulture and the matter mentioned below shall be written on the board.

बागवानी मिशन
Horticulture Mission

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 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 beneficaires through District Officers.
- 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.
- The Release proposals should be sent in the following format along with DMC approval.

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 UNDER SPECIAL INTERVENTIONS COMPONENT FOR TURMERIC BOILING UNITS FOR PRIMARY PROCESSING UNDER MIDH, TELANGANA

Sl. No	Name of the District	Name of the Beneficiary	Village & Mandal	Category	Number of the units	Number of drums consisting of the unit	Whether logo of MIDH written or not on the unit	Total expenditure incurred by the farmer	Serial no of the Unit	Remarks
1	2	4	5	6	7	8	9	10		11

Promoter /Farmer Concerned Horticulture Officer DHSO/DLHSCO

f. TURMERIC POLISHING DRUMS

1. Purchase of Turmeric Polishing Drums should be from the empanelled firms approved by the TS Agros for the year 2017-18.
2. The farmer/entrepreneur should inform the completion of the project to the concerned DHSO/DLHSCO in writing along with photograph.
3. Joint inspection team should ensure that fabrications of unit is done through empanelled firm approved by the Agros.
4. The committee consisting DHSO/DLHSCO, the concerned HO will inspect the unit 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 Polishing unit in the back ground and unique identity number of the Polishing unit.
5. The promoters of the unit shall give extensive publicity about functioning of the facility among horticulture growers to enable them to utilize the facility.
6. A self declaration to be taken from concerned farmer that unit will not be misused and shall be enclosed with the joint inspection report.
7. The unit must contain 2Polishing Drums (9 ft & it should contains no.of Polish Teeth, Wheels & Stands.
8. The capacity of the Polishing Drums unit should be 6-8 Quintalsin 10-15 minutes
9. DHSO/DLHSCO to assign specific number on Polishing Drums such as SHM/TPU/2017-18/Name of the District/1(Serial no of the district)
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 etc.,
13. A board with the logo of the MIDH shall be kept on the Turmeric Polishing Drums, The Logo of Mission for Integrated Development of Horticulture and the matter mentioned below shall be written on the board.

తెలంగాణరాష్ట్రప్రభుత్వం
ఉద్యానశాఖరాయితీతో
పసుపు పోలిషింగ్ 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 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.
- 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.
- 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 UNDER SPECIAL INTERVENTIONS COMPONENT FOR <u>TURMEIC POLISHING DRUMS</u> UNDER MIDH, TELANGANA

Sl. No	Name of the District	Name of the Beneficiary	Village & Mandal	Category	Number of the units	Number of Polishing drums consisting of the unit	Whether logo of MIDH written or not on the unit	Total expenditure incurred by the farmer	Serial no of the unit	Remarks
1	2	4	5	6	7	8	9	10		11

Promoter /Farmer Concerned Horticulture Officer DHSO/DLHSCO

9. HUMAN RESOURCE DEVELOPMENT

Objectives:

- Providing appropriate training to the farmers for adoption of high yielding varieties of crops and farming systems and also to sensitize on post harvest management.
- To familiarize the farmers about the production practices being followed by progressive farmers.

Non-Negotiables While Conducting Training Programme To The Farmers

a) Trainings to farmers:

1. The districts have to identify the training needs of the horticulture farmers in the district keeping in view, the horticulture profile, productivity pattern, incidence of pest, post harvest practices and other such relevant issues.
2. Based on the training needs, the DLHSCO/DHSO in consultation with field functionaries should prepare training calendar keeping the specific needs of the District in mind.
3. The calendar should contain mandal-wise crop-wise training schedule. Training programmes conducted without preparing the training calendar will not be eligible for drawing assistance from SHM funds.
2. The farmers / beneficiaries identified under SHM especially, for Area expansion, Protected Cultivation, Front line Demonstrations should invariably be covered under HRD program. .
3. The DLHSCO/DHSO shall identify resource persons including retired personnel of Horticulture dept., KVK's, progressive farmers and empanel them and their services can be used by paying honorarium.
4. Providing written literature in Telugu on the training subject to the trainees is a must. **If training is conducted without giving the written literature, it will not be considered as training for getting assistance.**
5. Feedback of the farmers on the usefulness of the training shall be obtained in specially designed feedback forms or in a register along with the signatures of the participants.
6. Documentation like photograph shall be taken for each training program. Press publicity should be given on these training programs.
7. The DLHSCO/DHSO should visit maximum number of training programmes as far as possible as this will give an opportunity to interact with farmers and get feedback on horticultural issues.
8. Attendance register of the farmers should be maintained by each officer.

b. Exposure visit to the farmers:

1. In order to familiarize the farmer about the production practices being followed in other states exposure visits should be organized.
2. The DLHSCO/DHSO should identify the places/ states where the suggested areas are being successfully practiced and coordinate with the institutions / agencies and fix tentative dates with the prior approval of DLHSCO/DHSO.

Training to farmers:

i) Within the State:

1. Training programme should be of one day duration and should focus on crop management during flowering, fruiting and pest & disease management.
2. It should be ensured that, the trainings conducted in a month should invariably cover **18 % SC farmers, 10 % ST farmers** and **33% women** beneficiaries / farmers
3. The Training programme should be held within the state. If feasible / possible a field visit of the farmers should be organized to the neighbouring districts to educate the farmers on latest technologies adopted. The expenditure per training should not exceed Rs.25,000/- per batch of 25 farmers (component wise indicative cost given below).
4. Programme to be documented in coordination with divisional / mandal PRO and photographs of local news paper/ video clippings to be sent to SHM at the end of the month along with progress report including banner.
5. Suitable resource persons should be identified for imparting training based on the Subject. The resource person must be either Scientists from DAATT Centre or from nearby Agriculture /Horticulture research stations of Prof. Jaya shankar Agril. University or SKLTS Horticulture University.

Component Wise Assistance for Training Programmes within the State - 2017-18

S.No	Component	Assistance @ Rs.25,000/- per training a batch of 25 farmers
1	Study material (Reading and writing material , CDs)	2000/-
2	Honorarium to faculty members / resource persons.	3000/-
3	Expenditure on food	5000/-
4	Travelling expenses	6000/-
5	Miscellaneous, contingent exp.	9000/-
	Total	**25,000/-**

d) Exposure Visit of Farmers:

i) Outside State:

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.
   - ✓ The Turmeric growing districts may plan visits to Erode, Salem in Tamilnadu where Precision farming has been taken up in Turmeric
2. The visits should be completed within the financial year 2016-17. 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. This is a project based component. 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. The same will submitted for approval of SLEC.
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.

iii. Training to Technical Staff

(DHSO/ DLHSCOs/Hos)

i) Within State:

The eligibility per participant is Rs.200/- per day besides TA/DA admissible as per APTA Rules. The nomination of Departmental Officers to training programme within the State will be made by SHM with the approval of DOH / Mission Director and funds will be released accordingly.

iv. Training to Tech. staff Other states (5day x 800 per day = 4000)

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.

v. Exposure Visits to Technical staff outside the Country

Under this Programme specific proposals need to be sent to NHM, for approval by GOI and expenditure of not more than Rs.5.00 lacs per participant and 100% cost of actual expenses will be admissible.

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 (A) (RC)
7	PRELIMINARY REPORT (Release of First Installment)	Format – IV (B) (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 (A) (RC)
9	Ripening Chamber	Format – V (B) (RC)
10	Subsidy Calculation Sheet	Format – V (C) (RC)
11	Detailed Report on Ripening Chamber at the time of final and Joint Inspection	FORMAT- V - (D) (RC)
12	Basic Data Sheet	Format – VI

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 (A) (CS)
7	PRELIMINARY REPORT (Release of First Installment)	Format – IV (B) (CS)
8	Component wise releases made by the Banker for cold storage	Format – V (A) (CS)
9	Format to conduct final and joint inspection by the committee for cold storage under Post Harvest Management component of MIDH, Telangana	Format – V (B) (CS)
10	Subsidy Calculation Sheet	Format – V (C) (CS)
11	Detailed Report on Cold Storage at the time of final and Joint Inspection	FORMAT- V - (D) (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 Xerox Copy	
13	Electricity approval	
14	KYC documents of all the partners	
15	VAT / CST 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	

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 Asst. Director of Horticulture _____.

DHSO/DLHSCO

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 DLHSCO/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 _____ 2017 in the presence of the following witnesses;

WITNESSES:

1.

(Sign of the Consultant)

Format – IV (A) (CS)

Preliminary (Inspection Report) while submitting 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/ Joint Individual/Partnership Firm/ Company.	:	
E	(i). Proposed Activity	:	Cold Storage
	(ii). Type	:	
	(iii). Proposed type of cooling system	:	
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 cold store building civil/pre engineered as on inspection date	:	
	(iv) Type of produce to be stored		

Promoter **HO** **DLHSCO/DHSO (Concerned)**

Format – IV (B) (CS)

PRELIMINARY 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/ Joint Individual/Partnership Firm/ Company.	:	
E	(i). Proposed Activity	:	Cold Storage
	(ii). Type	:	
	(iii). Proposed type of cooling system	:	
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 cold store	:	

building civil/pre engineered as on inspection date.

(iv). Type of produce to be stored

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 in to the subsidy reserve fund account bearing no:---------, IFSC Code:------ Bank:----------, Branch:---------- as the unit has constructed.

Promotor **HO** **DLHSCO/DHSO(Concerned)**

Format – V (A) (CS)

COMPONENT WISE RELEASES MADE BY THE BANKER FOR COLD STORAGE

Name of the Firm :

District :

Place :

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 (B) (CS)

FORMAT TO CONDUCT FINAL AND JOINT INSPECTION BY THE COMMITTEE 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:					

- 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 cold storage as per the norms of the MIDH.
2. This is to certify that the promoter has fulfilled all the observations made in the tech. viability report.

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

4. An amount of Rs._____ may be released in to the subsidy reserve fund account bearing no:---------, IFSC Code:------ Bank:----------, Branch:---------- towards 2nd& final installment.

Promoter HO TSG Member/ Local Scientist from DATT Centre

Banker Member from NABCONS DLHSCO/DHSO(Concerned)

Format – V (C) (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.)**	6000				
Total Eligible Subsidy (40% of cost)						**40% 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 as per the norms of the MIDH.
2. This is to certify that the promoter has fulfilled all the observations made in the tech. viability report.
3. This is to certify that the project is eligible to avail subsidy of Rs. _____
4. An amount of Rs._____ may be released in to the subsidy reserve fund account bearing no:---------, IFSC Code:------ Bank:----------, Branch:---------- towards 2nd and final installment.

Promoter HO TSG Member/ Local Scientist from DATT Centre

Banker Member from NABCONS DLHSCO/DHSO(Concerned)

FORMAT- V - (D) (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		

Promoter **HO** **Technical Consultant/ Local Scientist from DATT Centre**

Member from NABCONS DLHSCO/DHSO

BASIC DATA SHEET

Format – VI

A. Identification

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

B. Basic Cold Store Design Considerations

i) Commodity Storage Requirements

Type of Commodities/Produce		
Ideal / Recommended Storage Conditions – 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 (°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(°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(°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* (°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) °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**

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	VAT / CST 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	

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 Asst. Director of Horticulture

_____.

DHSO/DLHSCO

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 DLHSCO/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 _____ 2017 in the presence of the following witnesses;

WITNESSES:

1.

(Sign of the Consultant)

Format –IV (A) (RC)

RIPENING CHAMBERS

Preliminary (Inspection Report) while submitting 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/ Joint Individual/Partnership Firm/ Company.	:	
E	(i). Proposed Activity	:	Ripening Chamber
	(ii). No of Chambers	:	
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 :

Promoter **HO** **DLHSCO/DHSO (Concerned)**

Format – IV (B) (RC)

PRELIMINARY 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/ Joint Individual/Partnership Firm/ Company.	:	
E	(i). Proposed Activity	:	Ripening Chamber
	(ii). Type	:	
	(iii). Proposed type of cooling system	:	
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 cold store building civil/pre engineered as on inspection date. :

(iv). Type of produce to be stored :

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.

HO **DLHSCO/DHSO (Concerned)**

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

RIPENING CHAMBER **Format – V (A) 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)

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

Certificates:

1) This is to certify that the promoter has established Ripening Chamber as per the norms of the MIDH.
2) This is to certify that the Ripening Chamber is eligible to availed subsidy of Rs.
3) An amount of Rs. May be released as II spell

Promoter **Banker** **HO** **DLHSCO/DHSO**

TSG (Member) / Local Scientist from DATT **Sr. Officer**

Member from NABCONS

RIPENING CHAMBERS **Format – V (B) - 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 TSG Member/ Local Scientist from DATT Centre

Banker Member from NABCONS DLHSCO/DHSO(Concerned)

CALCULATION SHEET FOR RIPENING CHAMBER **Format – V (C) - RC**

Name of the Ripening Chamber : **M/s.**

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 : Rs. In Lakhs.											

Promoter **HO** **TSG Member/ Local Scientist from DATT Centre**

Banker **Member from NABCONS** **DLHSCO/DHSO(Concerned)**

Format –V (D) -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 only the land cost included in the
  If purchased for this purpose, sale deed: }

  Title deed : project cost

  Area (sq.mt) :

  Cost of land :
- Shed (own/lease) : } If any the shed cost is included
  Dimensions of the structure : }

  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 TSG Member/ Local Scientist from DATT Centre

Banker Member from NABCONS DLHSCO/DHSO(Concerned)

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 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 (°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(°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(°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* (°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) °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**

DEPARTMENT OF HORTICULUTURE-
GOVERNMENT OF TELANGANA

Mission for Integrated Development of Horticulture 2017-18

Application for Subsidy

Recent Passport Size Photograph

1	Application No.	**:**	
2	Online ID No	**:**	
3	Name of the Scheme	**:**	
4	Name of the Crop	**:**	
5	Name of the farmer	**:**	
6	Name of the Father/Husband	**:**	
7	Village	**:**	
8	Mandal	**:**	
9	District	**:**	
10	Survey No	**:**	
11	Land (Leased/Owned)	**:**	(if owned pattadhar passbook/ orginal computer pahani/Recent Registration Document)
13	Total Area (in Ha)	**:**	
14	Proposed Area (in Ha)	**:**	
	No of Plants per Ha	**:**	
	Spacing (in meters)	**:**	
13	SF/MF/BF	**:**	
14	Category**:**		General/BC/SC/ST
15	Soil Type	**:**	Red soils/Black solis/Red loamy soils/Sandy soils
16	Source of Irrigation	**:**	(Bore well/open well)
17	Drip Irrigation	**:**	Yes/No
18	Total Amount for Non-Subsidy	**:**	
19	DD No. for Non- Subsidy amount	**:**	
20	Whether any Govt. Subsidy availed previously	**:**	
21	Name of the Bank	**:**	

22	Account Number	**:**
23	IFSC Code/RTGS Code	**:**
24	Name of the Branch	**:**
25	Mobile number	**:**
26	Aadhaar number	**:**

Declaration

I, _____

declare that the particulars furnished above are true to the best of my knowledge and I promise that the benefit obtained from State Horticulture Mission 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 including recovery of the subsidy amount with 12% interest to the Government.

Signature of the Farmer / Entrepreneur.

Recommendations of the

Horticulture Officer _____.

Receipt

Received an application of Sri/Smt _____ S/o./D/o._____(V)_____,(M)_____, Dist_____. On _____ for _____ scheme and this application will be considered after field verification on First come First serve Basis. Beneficiaries ID_____.

Horticulture Extension Officer Signature

Horticulture Officer