2. ONION STORAGE STRUCTURES

REQUIREMENTS

For effective long storage of onion the parameters essential to be looked after are the bulb size, choice of cultivars, cultivation practices, time of harvest, field curing, removal of tops, drying, grading, packing, storage conditions (optimum storage range of relative humidity 65% to 70% with the temperature ranging between 25°C to 30°C).

Salient Features of Improved Storage Structures are:

1. Construction of structure on a raised platform to prevent moisture and dampness due to direct contact of bulbs with the soil.
2. Use of Mangalore tile type roof or other suitable materials to prevent built up of high inside temperature.
3. Increased centre height and more slope for better air circulation and preventing humid micro climate inside godown.
4. Providing bottom and side ventilations for free and faster air circulation and to avoid formation of hot and humid pockets between the onion layers.
5. Avoid direct sunlight or rain water falling on onion bulbs to reduce sun scald, fading of colour and quality deterioration.
6. Maintenance of stacking height to avoid pressure bruising.
7. Periodical disinfection of structures and premises to check rottage.
8. Cost effectiveness of structures is based on utilization of locally available material for the construction.

PATTERN OF ASSISTANCE :

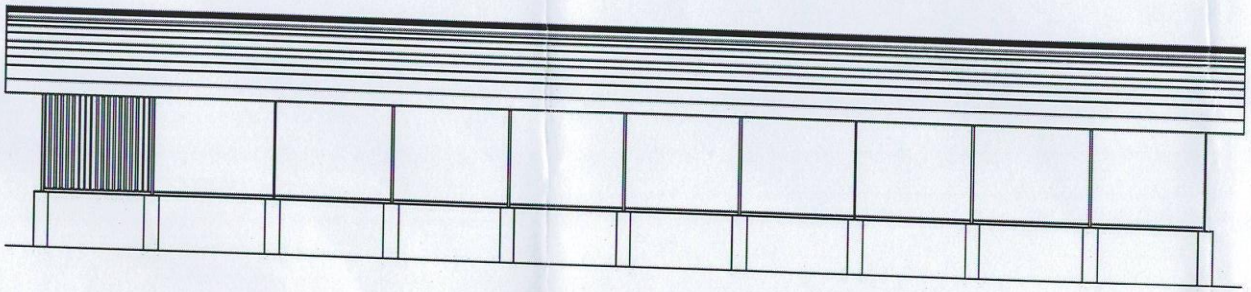
- **Unit cost for 25 MT capacity of Low Cost Onion Storage Structure: Rs.1.75 lakh per unit.**
- **Subsidy @ 50% of the total cost.**

TECHNO - FINANCIAL PARAMETERS AFDOPTED FOR WORKING OUT THE ECONOMICS OF A 25 MT ONION STORAGE STRUCTURE

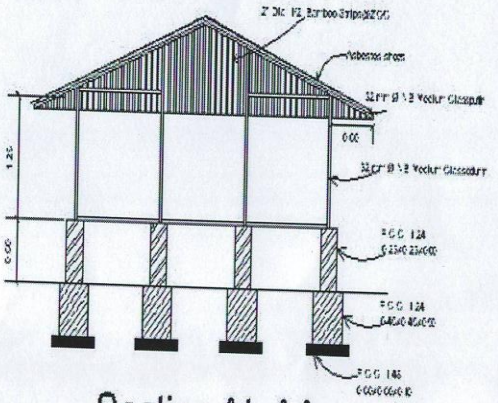
1	Land requirement	6.5 m X 7.0 m
2	Storage space requirement	4.5 m X 6.0 m
3	Technology preferred	Natural or forced ventilation maintaining a temperature between 25 and 30 o C with a relative humidity range of 65 to 70 %.
4	Clearance of storage platform from the ground	60 cm
5	Height of the storage platform	90 to 150 cm

ESTIMATE FOR ONION STORAGE CAPACITY OF 25 MT.

Sl. No.	Description	Unit	Total	Rate	Amount (Rs.)
1	Excavation for foundation	Cum	3.888	132	513.26
2	P.C.C. 1:4:8 in foundation	Cum	0.729	3000	2187.00
3	R.C.C. 1:2:4 for columns	Cum	2.339	3840	8981.76
4	Nominal Reinforcement to columns	Kg	320	62.40	19968.00
5	Structural Steel Works	Kg	1200	72	86400.00
6	A/C Sheet Roofing	Sq.mtr.	83.2	240	19968.00
7	A/C Sheet Ridge	Rmt	13	144	1872.00
8	2” dia 4/2 bamboo strips @ 3” c/c	Rmt.	1454.4	30	43632.00
		TOTAL			**183522.02**
				Rounded to Rs.	**1,75,000.00**



Side Elevation



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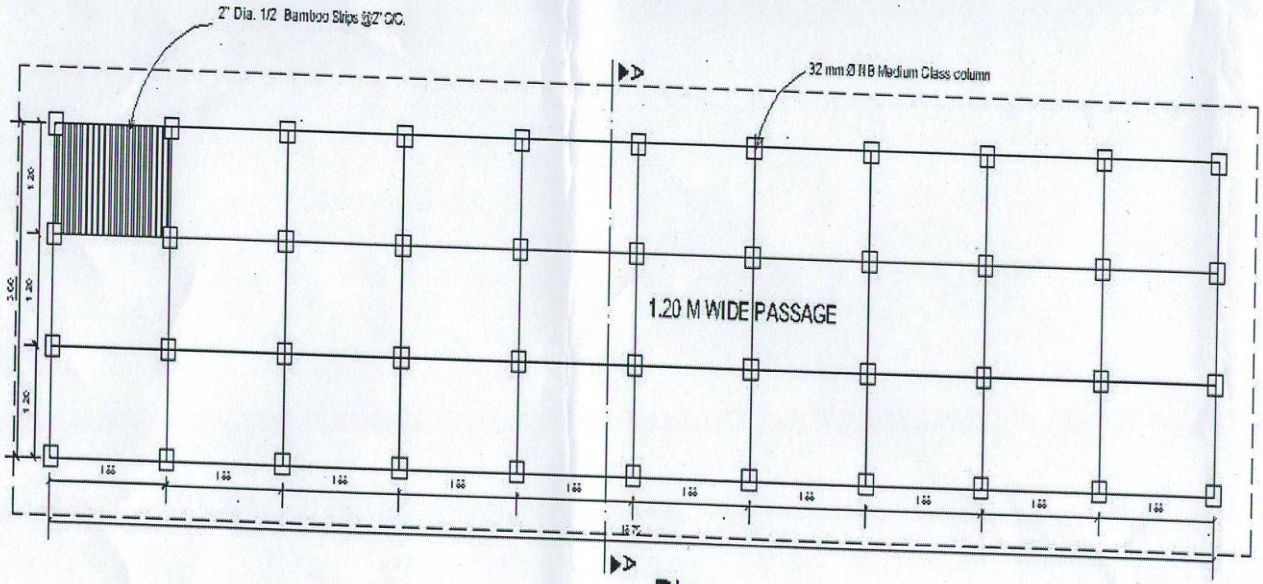

Plan

Plan For Proposed Onion Storage Shed Of 25 M.T.
(Double Row Plan)

DRW. : Dhananjay Pawar	Date : 18/08/07
Architect Dhananjay M. Shinde Ph. No.- 0253-2571201,2316706	Structural Engineer Pramod Kulkarni Ph. No.-

N.H..R.D.F.. Nashik.

APPLICATION FOR AVAILING ASSISTANCE / SUBSIDY UNDER MIDH

(COMPONENT: ONION STORAGE STRUCTURE)

Name of the Scheme: **Post Harvest Management**

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

Declaration

I, _____

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

Enclosures: 1. Affidavit
2. Pattadar Pass Book
3. Detailed Project Estimate by Civil Engineer
(Regd. No. along with Seal)

Signature of the Farmer / Entrepreneur.

Recommendations of the Horticulture Officer : _____

Horticulture Engineer **Horticulture Officer** **Asst. Director of Horticulture.**

FORMAT TO CONDUCT FINAL AND JOINT INSPECTION OF **ONION STORAGE STRUCTURE** BY THE COMMITTEE UNDER POST HARVEST MANAGEMENT COMPONENT OF MIDH, AP.

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

As per project report				As per the inspection and actual investment				
Details	**Specifications/Details**	**Qty**	**Total Cost (Rs)**					

Certificates:

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

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

3) This is to certify that Sri./ Smt. _____ is eligible to avail subsidy of Rs. ..... and the same may be released.

Promoter Horticulture Engineer Horticulture Officer ADH DDH