



Maharashtra Agribusiness Network (MAGNET) Project

Toolkit for preparation of DPR

Lemon

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1. KEY NOTES

1. These project plans are designed to assist as a ready sample for reference/ adoption by the applicants wishing to submit their DPRs for consideration of grant assistance under Output II of the MAGNET Project (GoM).
2. While these sample project plans are designed keeping a specific MAGNET crop as the target crop, users must understand that in majority cases most facilities are relevant for processing of other MAGNET crops as well. For instance:
 - A Washing-Sorting-Grading Facility can be used for processing of all MAGNET crops (as per availability in the user's catchment zone). Facilities having round grader can ensure most of the round MAGNET fruits can be graded in the same facility.

Case to case basis, applicants may have to make certain variations or add specific machinery to enable processing of some crops. It is important that users understand that handling multiple MAGNET crops (based on availability in the catchment zone) is desirable to ensure year-round operations as well as technical and financial viability of the plants.

Users also need to ensure that at least 70% of the plant capacities must be utilized for MAGNET crops and the spare capacity can be utilized for non-MAGNET crops. [Only exception will be allowed in case of strawberries, wherein (in locations like Mahabaleshwar) applicants may not have abundant availability of other MAGNET crops].

3. **Users must understand that MAGNET does a profile screening and evaluates if the applicant's profile (in terms of recent year turnovers; experience in manufacturing and/or trading of same/ similar value-added products; technical and technology knowhow; backward and forward linkages, etc.) demonstrates applicant's abilities to handle proposed activities and final products marketing.**
4. Users may kindly note that **MAGNET's key focus is on Primary Processing and Preservation and some Secondary Processing in Integration** is also acceptable. MAGNET does not prefer/ promote high value adding tertiary processing, except on a case to case (merit) basis. In this context, a "PREFERRED PROJECT PROMOTER PROFILE" has been shared with each model.
5. The plans comprise major required technical civil works, key plant & machinery and utility equipment required for sound implementation and operation thereafter. Also, while designing the sample project plans, best efforts have been taken to include critical components; This does not restrict the user to add/reduce/modify the project components. While care has been taken to ensure ideal and optimum provision of all required civil areas/capacities and quantities of equipment's, **users must conduct their own research and, after thorough discussions with their prospective suppliers/ project consultants, design (i.e., capacities, quantities, etc.) their own projects accordingly.**
6. The project cost calculations are based on cost norms (of MIDH/MOFPI, wherever applicable). While preparing DPR, **users must necessarily seek quotations from key suppliers to arrive at their own project cost** accordingly. However, users must also note that grant, if the project is selected, shall be accorded as per prevailing cost norms.
7. This project plans herein are designed to handle lemon (primarily) and other compatible MAGNET crops could also be handled in the same facility. While proposing multi-fruit handling (i.e., Lemon and other MAGNET crops), users must take necessary care to incorporate changes in project components, if any.
8. "As per guidelines of Output II (Matching Grant Component, MAGNET Project, GoM), the promoter's contribution (equity) should be at least 20% of the total project cost. Thus, in the Means of Finance presented in each plan of this report, the Promoter Contribution is conservatively restricted to 20% of the Total Project Cost. While designing their own projects, project promoters may require infusing greater percentage of equity, based on term loan being sought from FI and grant being sought from MAGNET.

Exception: In case of CMRC or Women Led/Women Owned FPO applicants only, the equity contribution should be at least 5% of the total project cost. Thus, CMRC or Women Led/Women Owned FPO







(applicant) users, may require restructuring their means of finance, also based on term loan being sought from FI and grant being sought from MAGNET. "

9. As per guidelines of Output II (Matching Grant Component, MAGNET Project, GoM), the limit of eligible Preliminary & Pre-operative expenses (for grant consideration) is maximum 5% of the eligible project cost or Rs. 20 Lakh, whichever is lower. Thus, P&P expenses in each of the plans presented in the project cost are conservatively restricted to same extent only. While designing their own projects, users may require provisioning for greater/ lesser amount of P&P, based on requirement of the project.
10. In the Project Cost of each of the plans presented herein this report, provision for components such as Working Capital Margin, Misc. Fixed Assets and Contingencies has not been made. As per guidelines of Output II (Matching Grant Component, MAGNET Project, GoM), these components are not eligible for grant. However, while designing their own projects, users may require provisioning for these components, based on requirement of the project.
11. The cost of utilities and material handling equipment will be considered under eligible project cost subject to restriction of eligible cost of same being maximum 25% of the total project cost.
12. Users may refer this report as reference/ guidance for developing their own project plans, however necessarily in conjunction with the EOI Guidelines.

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2. CROP PROFILE: LEMON

Lemon at Glance

-  India is the largest producer of Lemon for production and area followed by Mexico and China.
-  Albania has the highest productivity of Lemon, followed by UAE
-  Andhra Pradesh, Gujarat, and Karnataka are the 3 highest lemon producing states in India
-  Maharashtra produces 10% lemons of the total production in India
-  The average productivity of Lemon in India is 11.17 MT/Ha while Maharashtra has the productivity of 8.97 MT/ha and ranks 5th in the country
-  Mexico is the largest exporter and USA is the largest importer of lemon

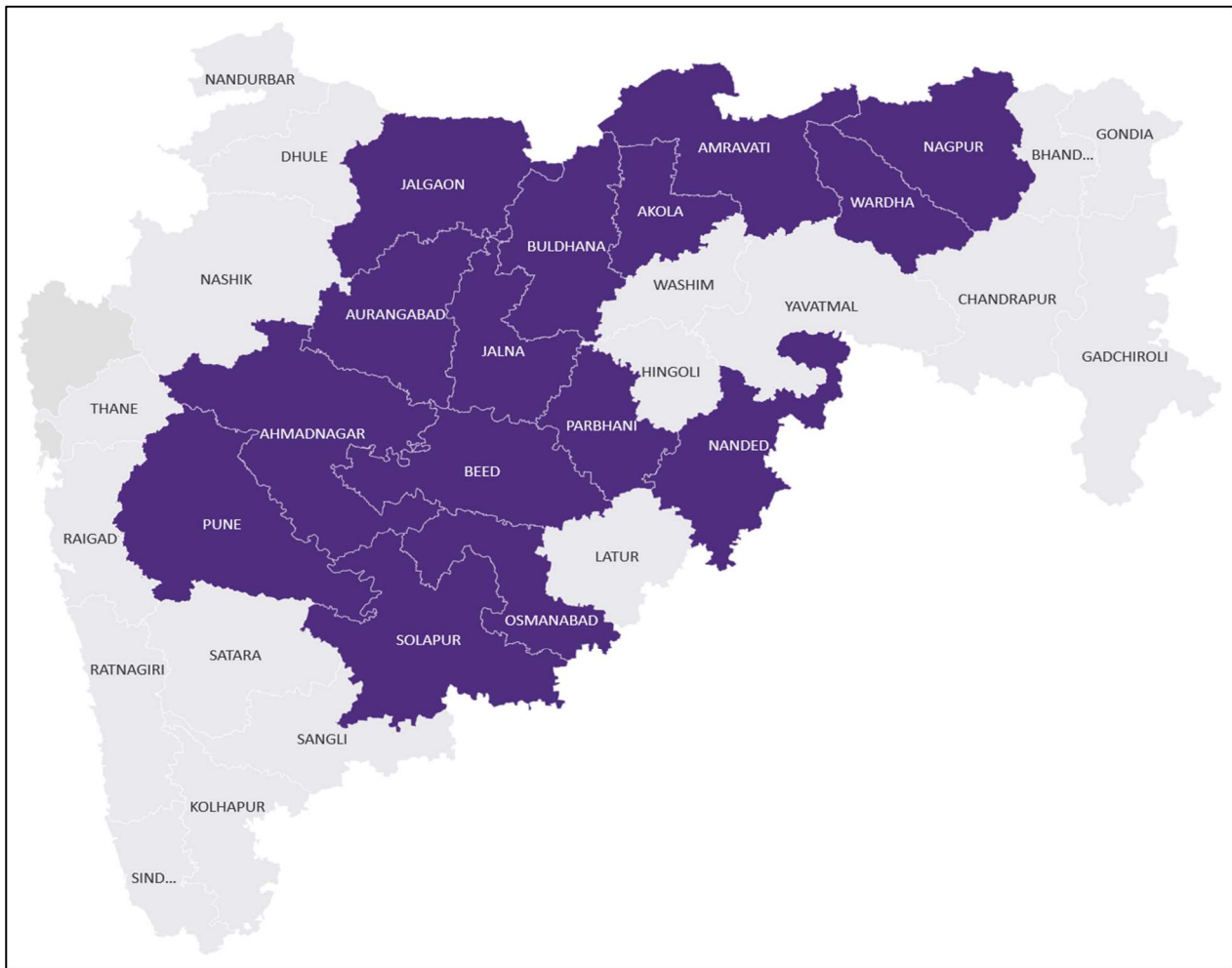
The lemon is a species of small evergreen tree in the flowering plant family Rutaceae. The tree's ellipsoidal yellow fruit is used for culinary and non-culinary purposes throughout the world, primarily for its juice, which has both culinary and cleaning uses. The juice of the lemon is about 5-6% citric acid with a pH of around 2.2, giving it a sour taste. The distinctive sour taste of lemon juice, derived from the citric acid, makes it a key ingredient in drinks and foods.

3. LEMON SNAPSHOT

India	Total Production in India	2.63 million MT
	Total Area under cultivation in India	0.23 million hectares
	Top 5 Lemon producing States	Gujarat, Madhya Pradesh, Karnataka, Odisha, Maharashtra

Maharashtra	Total Production in Maharashtra	0.26 million MT
	Average yield in Maharashtra	8.97 MT/ha (2021-22)
	Top Lemon producing Districts in MH	Ahmednagar, Jalgaon, Solapur, Akola, Beed
	Seasonality of Lemon in Maharashtra	Lemons are available throughout the year (Peak: September - October)

4. LEMON CLUSTERS IDENTIFIED UNDER MAGNET



District	Area in '000 ha	Quantity in '000 MT	Productivity (MT/ha)
Ahmednagar	7.250	72.500	10.00
Jalgaon	4.860	51.030	10.50
Solapur	4.962	36.666	7.39
Akola	2.950	29.500	10.00
Beed	2.900	14.499	5.00
Pune	0.700	10.500	15.00
Osmanabad	0.585	10.360	17.71
Jalna	0.577	5.965	10.34
Amravati	0.524	4.178	7.97
Nanded	0.332	3.320	10.00
Parbhani	0.608	3.100	5.10
Aurangabad	0.393	2.953	7.51
Nagpur	0.267	1.818	6.80
Buldhana	0.622	1.612	2.59
Wardha	0.220	0.989	4.50

Source: Area and Production Statistics, Ministry of Agriculture and Farmers Welfare: 2021-22

5. SOME USEFUL LINKS – MARKET INTELLIGENCE AND TECHNOLOGY

Market Intelligence		
Sr. No	Description	Web - Links
1	Lemon Industry Report	Tridge Lemon Market Report.pdf
2	European Market Potential for fresh lemon	The European market potential for fresh lemons (cbi.eu)
3	Lemon Trade Report	Report on Lemon Trade

Project Components & Technology			
Sr. No	Components	Links	Document Page no
1	Sorting, Grading, Washing	http://www.nccd.gov.in/PDF/Cold-chain%20Awareness%20Booklet.pdf	8
2	Pre-cooling unit		8
3	Cold room (staging)		9
4	Cold storage units		9
5	Ripening Chamber		19
6	Refer van		9
7	Lemon Pickle Line	<ul style="list-style-type: none"> • (31) Pickle Making Machine Price in India pickle business plan - YouTube • Automatic Lemon cutting machine for pickle industry or lemon slicer (youtube.com) • Pickle Bottle filling (youtube.com) 	

Disclaimer: The links herein are provided as a reference resource for research of applicants. MAGNET Project, MAGNET Society and Grant Thornton (PISC) give no warranty and accept no responsibility or liability for the accuracy, or the completeness of the content in these resources. The links herein may include research work of any institution or even technology overview by some technology supplier. MAGNET Project, MAGNET Society and PISC do not recommend or endorse works of any specific institution or any specific supplier or any specific make of technology or products. The links may contain information on certain processing activities (especially high value adding tertiary processing activities) which are not promoted by MAGNET for grant assistance. Users must refer to EOI Guidelines in this context or may contact MAGNET office for guidance.

6. PREFERRED PROJECT PROMOTER PROFILE

A. High Capital Investment & 'Tough to Compete' Businesses – which may be pursued by highly seasoned and experienced applicants

- VCO/FPO**, who is eligible as per eligibility *criteria* under Matching Grant (Output II) Guidelines of the MAGNET Project, **as well as** has been involved in manufacturing and/or trading of same/ similar value-added products of MAGNET/Non-MAGNET crops in recent years and has developed significant credentials in domestic and/or export markets. This should be supported by relevant documentation such as past **trade history, Contracts/ MoU/ Lol** with existing and potential buyers of project products.
- The promoter's experience and detailed project report exhibit considerable understanding of - technical and technology knowhow, market potential and market dynamics for the proposed products, risks and opportunities involved.
- Turnover & Net Worth**
 - **For VCO** – The audited turnover figures of recent 3 years and latest certified Net Worth (with supporting documents) of the company/firm demonstrate promoter's capabilities to invest in and operate the proposed project.
 - **For FPO** - The audited turnover figures of recent 3 years and the current Paid-up Capital (and reserves) of the company/co-operative demonstrate promoter's capabilities to invest in and operate the proposed project.

B. Moderate Capital Investment & Competitive Businesses – may be pursued by applicants having some relevant experience

- VCO/ FPO**, who is eligible as per eligibility criteria under Matching Grant (Output II) Guidelines of the MAGNET Project, **as well as** has been involved in manufacturing and/or trading of agri/food products of MAGNET/Non-MAGNET crops in recent years and has developed significant credentials in domestic and/or export markets.
- The promoter's experience and detailed project report exhibit considerable understanding of - technical and technology knowhow, market potential and market dynamics for the proposed products, risks and opportunities involved.
- Turnover & Net Worth**
 - **For VCO** – The audited turnover figures of recent 3 years and latest certified Net Worth (with supporting documents) of the company/firm demonstrate promoter's capabilities to invest in and operate the proposed project.
 - **For FPO** - The audited turnover figures of recent 3 years and the current Paid-up Capital (and reserves) of the company/co-operative demonstrate promoter's capabilities to invest in and operate the proposed project.

C. Low Capital Investment & Competitive Businesses – may be pursued by applicants having some relevant experience

- Any applicant (VCO/ FPO/ CMRC/ Other)** who eligible as per eligibility criteria under Matching Grant (Output II) Guidelines of the MAGNET Project.

7. MODEL I – PACKHOUSE OPERATIONS AND PICKLE LINE

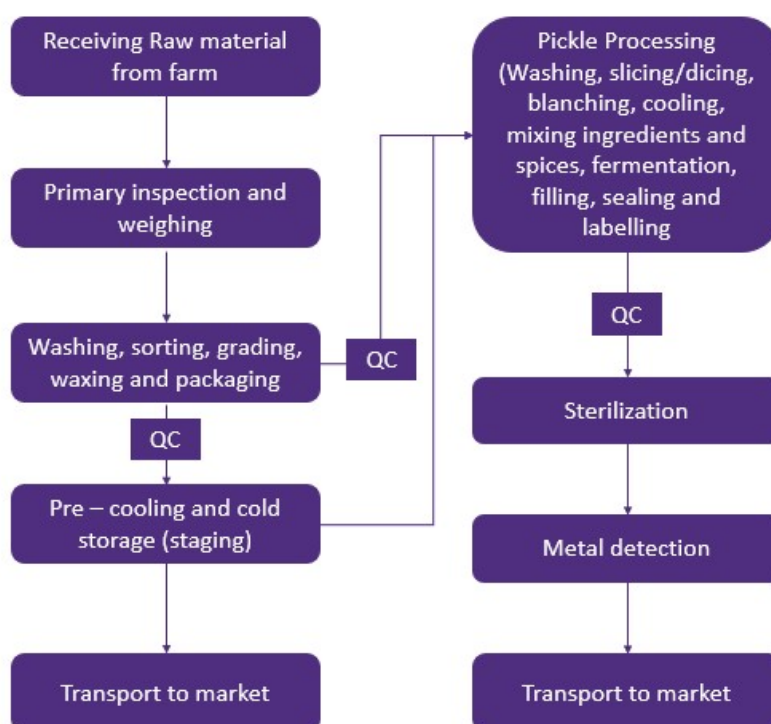
MODEL – I: PACKHOUSE OPERATIONS AND PICKLE LINE

Target MAGNET Crop	Primary Crop: Lemon Secondary Crops: Any other MAGNET crops suitable for project.
Project Category	(Recommended as) Small Sized
Description	The proposed project primarily involves primary pack-house operations (integrated washing-sorting-grading-waxing-packing) for Lemon & other compatible MAGNET crops. The facility also includes a small-scale pickle production unit. The facility shall enable trade of fresh lemon & other compatible MAGNET Crops. Further, the pickle unit will enable processing and marketing of pickles of lemon & other compatible MAGNET Crops. For efficient operations of the facility, a suitable pre-cooling, staging cold room as well as utilities that are required to support the main operations are incorporated.
Preferred Applicant Profile	Low Capital Investment & Competitive Businesses - Can be pursued by any applicant eligible as per Eligibility Criteria

i) Key Facilities:

S. No.	Type of facilities proposed to be created	Total Capacity	Total No. of Units
1	Packhouse (Washing, Sorting, Grading, Waxing Line)	1 TPH	1
2	Pre-cooling	6 MT	1
3	Staging cold room	30 MT	1
4	Pickle Line	3 TPD	1
5	Utilities	Transformer, DG Set, APFC, Stabilizer, Crates and Pallets	1 Set

ii) Process Flow



iii) Project Cost:

S. No.	Components	Proposed Cost	*Eligible Cost	Grant on Eligible Cost (%)	Matching Grant (Rs. Lakhs)
1	Technical Civil Works		38.35	60%	23.01
2	Non-Technical Civil Works		-	0%	-
3a	Main P&M		85.26	60%	51.15
3b	Utilities		69.23	60%	30.37
4	Reefer Van		-	60%	-
5	Misc. Fixed Assets			60%	-
6	Contingencies		-	0%	-
7	Working Capital Margin		-	0%	-
	Subtotal		192.83		104.53
8	Preliminary & Pre-operative Expenses		9.64	60%	5.79
	Total		202.48		110.32

iv) Means of Finance

Means of Finance	Proposed Amount (Rs. Lakhs)	Eligible Cost (Rs. Lakhs)	% of Total Cost
Promoter Equity		40.50	20%
Bank Term Loan		51.66	26%
Matching Grant		110.32	54%
Total		202.48	100%

*The project cost calculations are based on cost norms (of MIDH/MOFPI, wherever applicable). While preparing DPR, users must necessarily seek quotations from key suppliers to arrive at their own project cost accordingly. However, users must also note that grant, if the project is selected, shall be accorded as per prevailing cost norms.

Civil Works (Puff Panels/ Brick Wall)							
							Rupees in Lakh
Sr. No.	Description	Area (Sq. Meter)	Cost Norm Per sq.m.	Total Cost (As per Cost Norm)	Taxes	Total Eligible Cost	Remark
A	Technical Civil Work						
1	Pre-cooling Chamber	30.00	-	-	-	-	Consolidated cost norms considered in P&M
2	Staging Cold Room	50.00	-	-	-	-	
3	Washing-Sorting-Grading-Waxing-Packing Area	150.00	0.10	15.00	2.70	17.70	As per cost norms
4	Pickle Unit Area	100.00	0.10	10.00	1.80	11.80	
5	Testing Lab Area	15.00	0.10	1.50	0.27	1.77	
6	Water tank - UGT	LS		2.00	0.36	2.36	Actual requirement of water will vary as per applicant's end use
7	Water tank - OHT	LS		2.00	0.36	2.36	
8	Toilets (Separate for Male & Female)	20.00	0.10	2.00	0.36	2.36	As per cost norms
	Sub Total (A)	365.00		32.50	5.85	38.35	
B	Non-Technical Civil Works						
1	Administrative Office	-	-	-	-	-	Ineligible
2	Canteen	-	-	-	-	-	
3	Internal Roads/ Compound Wall	-	-	-	-	-	
	Sub Total (B)			-	-	-	
	Grand Total (A+B)	365.00		32.50	5.85	38.35	

Plant & Machinery									
									Rupees in Lakh
Sr. No	Plant and Machinery	Capacity	Quantity	Critical/Optional	Cost Norm per unit	Total Cost (All Units)	Taxes	Total Eligible Cost	Remark
A	Main Plant & Machinery								
1	Pre-cooling Chamber	6 MT each	1	Critical	25.00	25.00	4.50	29.50	As per cost norms
2	Staging Cold Room	30 MT each	1	Critical	15.00	15.00	2.70	17.70	As per cost norms
3	Washing-Sorting-Grading-Waxing - Packing Line	1 TPH	1 Set						
a	Fruit Washer	For 1 TPH Line	1	Critical	12.50	12.50	2.25	14.75	As per cost norms
b	Surface Dryer Fan Conveyor		1	Critical					
c	Round Fruit Grader		1	Critical					
d	Conveyor Belt		1	Critical					
e	Sorting Tables		2	Critical					
f	Wax Coating line		1	Optional					
g	Weighing Machines	1 unit x 50 KG, 1 Unit X 100 Kg	2	Critical					
h	SS Packing Tables		2	Critical					
i	Strapping Machine		1	Optional					
4	Pickle Line (Lemon)	3 TPD	1 set						
a	Washing tank, preparation tables, cutting/slicing machine	For 3 TPD capacity	1 Set	Critical	15.00	15.00	2.70	17.70	As per cost norms
b	Pickle blending machine, pickle filling machine, mixing tanks			Critical					
c	Lug capping machine			Critical					
d	Trolleys & elevators			Critical					
5	Pickle Bottle Sterlizer			Optional	1.75	1.75	0.32	2.07	As per cost norms

Plant & Machinery									
Rupees in Lakh									
Sr. No	Plant and Machinery	Capacity	Quantity	Critical/Optional	Cost Norm per unit	Total Cost (All Units)	Taxes	Total Eligible Cost	Remark
6	Metal Detector			Critical	2.00	2.00	0.36	2.36	Eligible cost as per market rate analysis
7	Lab equipment's	Misc. (As required for plant operations)	1 Set	Optional	1.00	1.00	0.18	1.18	Eligible cost as per market rate analysis
	Subtotal (A)					72.25	13.01	85.26	
B	Utilities								
1	Transformer	80 KVA	1	Critical	1.15	1.15	0.21	1.36	As per cost norms
2	3 Phase electrification including power & controls cabling, PCC & MCC panel, Earthing, Internal Lighting, etc	Misc.	1 Set	Critical	4.00	4.00	0.72	4.72	Eligible cost as per market rate analysis
3	Solar Power system (On grid/Off grid)	60 KW	1	Optional	32.73	32.73	5.89	38.62	As per cost norms
4	DG Set	60 KVA	1	Critical	6.00	6.00	1.08	7.08	As per cost norms
5	Automatic Power Factor Controller	80 KVA	1	Critical	0.72	0.72	0.13	0.85	
6	Servo Voltage Stabilizer	80 KVA	1	Critical	0.77	0.77	0.14	0.91	
7	RO/ Water Softening Plant	1 KLPH	1	Optional	1.75	1.75	0.32	2.07	
8	Effluents Treatment Plant (ETP)	10 KLD	1 Set	Optional	2.00	2.00	0.36	2.36	
9	Sewage Treatment Plant (STP)	5 KLD	1 Set	Critical	3.75	3.75	0.68	4.43	
10	Fire Safety Equipment's	Misc.	1 Set	Critical	3.65	3.65	0.66	4.31	1% of technical civil area
11	Plastic Crates	20 KG	400	Critical	0.00275	1.10	0.20	1.30	As per cost norms
12	Plastic Pallets	1 MT	30	Critical	0.03	0.75	0.14	0.89	

Plant & Machinery									
									Rupees in Lakh
Sr. No	Plant and Machinery	Capacity	Quantity	Critical/Optional	Cost Norm per unit	Total Cost (All Units)	Taxes	Total Eligible Cost	Remark
13	Hand pallet truck	2 MT	1	Critical	0.30	0.30	0.05	0.35	Eligible cost as per market rate analysis
	Subtotal (B)					58.67	10.56	69.23	
	Grand Total (A+B)					130.92	23.57	154.48	

8. MODEL II – PACKHOUSE OPERATIONS AND PICKLE LINE (LARGE CAPACITY)

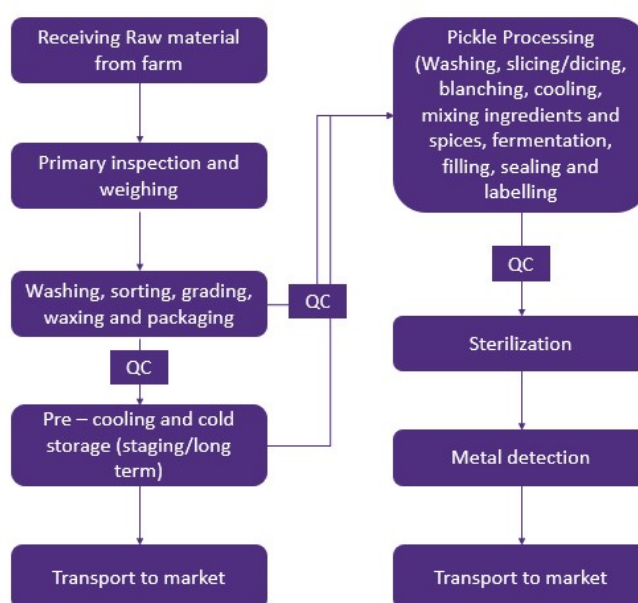
MODEL – II: PACKHOUSE OPERATIONS AND PICKLE LINE (LARGE CAPACITY)

Target MAGNET Crop	Primary Crop: Lemon Secondary Crops: Any other MAGNET crops suitable for project
Project Category	(Recommended as) Large Sized
Description	The proposed project primarily involves primary pack-house operations (integrated washing-sorting-grading-waxing-packing) for Lemon & other compatible MAGNET crops. The facility also includes a pickle production unit. The facility shall enable trade of fresh lemon & other compatible MAGNET Crops. Further, the pickle unit will enable processing and marketing of pickles of lemon & other compatible MAGNET Crops. For efficient operations of the facility, a suitable pre-cooling, staging cold room, cold storage as well as utilities that are required to support the main operations are incorporated.
Preferred Applicant Profile	Moderate Capital Investment & Competitive Businesses – may be pursued by applicants having some relevant experience

i) Key Facilities:

S. No.	Type of facilities proposed to be created	Capacity	No. of Units
1	Packhouse (Washing-Sorting-Grading-Waxing - Packing Line)	2 TPH	1
2	Pre-cooling	6 MT	1
3	Staging Cold Room	30 MT	1
4	Cold storage	80 MT	1
5	Pickle Line	5 TPD	1
6	Utilities	Transformer, DG Set, APFC, Stabilizer, Crates and Pallets	1 Set

ii) Process flow:



iii) Project Cost:

S. No.	Components	Proposed Cost	Eligible Cost*	Grant on Eligible Cost (%)	Matching Grant (Rs. Lakhs)
1	Technical Civil Works		61.66	60%	36.99
2	Non-Technical Civil Works		-	0%	-
3a	Main P&M		121.25	60%	72.75
3b	Utilities		97.93	60%	46.38
4	Reefer Van		13.64	60%	8.18
5	Misc. Fixed Assets		-	60%	-
6	Contingencies		-	0%	-
7	Working Capital Margin		-	0%	-
	Subtotal		294.47		164.30
8	Preliminary & Pre-operative Expenses		14.72	60%	8.83
	Total		309.19		173.13

iv) Means of Finance

Means of Finance	Proposed Cost (Rs. Lakhs)	Eligible Amount (Rs. Lakhs)	% of Total Cost
Promoter Equity		61.84	20%
Bank Term Loan		74.22	24%
Matching Grant		173.13	56%
Total		309.19	100%

*The project cost calculations are based on cost norms (of MIDH/MOFPI, wherever applicable). While preparing DPR, users must necessarily seek quotations from key suppliers to arrive at their own project cost accordingly. However, users must also note that grant, if the project is selected, shall be accorded as per prevailing cost norms.

Civil Works							Rupees in Lakh
Sr. No.	Description	Area (Sq. Meter)	Cost Norm Per sq. m.	Total Cost (As per Cost Norm)	Taxes	Total Eligible Cost	Remark
A	Technical Civil Work						
1	Pre-cooling Chamber	30.00	-	-	-	-	Consolidated cost norms considered in P&M
2	Staging Cold Room	50.00	-	-	-	-	
3	Cold Storage area	75.00	-	-	-	-	
4	Washing-Sorting-Grading-Waxing-Packing Area	200.00	0.10	20.00	3.60	23.60	As per cost norms
5	Pickle Unit Area	150.00	0.10	15.00	2.70	17.70	
6	Machine room area	20.00	0.10	2.00	0.36	2.36	
7	Testing Lab Area	15.00	0.10	1.50	0.27	1.77	
8	Weighbridge Civil Works	LS		1.75	0.32	2.07	Eligible cost as per market rate analysis
9	Water tank - UGT	LS		6.00	1.08	7.08	Actual requirement of water will vary as per applicant's end use
10	Water tank - OHT	LS		4.00	0.72	4.72	
11	Toilets (Separate for Male & Female)	20.00	0.10	2.00	0.36	2.36	As per cost norms
	Sub Total (A)	560.00		52.25	9.41	61.66	
B	Non-Technical Civil Works						
1	Administrative Office	-	-	-	-	-	Ineligible
2	Canteen	-	-	-	-	-	
3	Internal Roads/ Compound Wall	-	-	-	-	-	
	Sub Total (B)			-	-	-	
	Grand Total (A+B)	560.00		52.25	9.41	61.66	

Plant & Machinery									
									Rupees in Lakh
Sr. No	Plant and Machinery	Capacity	Quantity	Critical/Optional	Cost Norm per unit	Total Cost (All Units)	Taxes	Total Eligible Cost	Remark
A	Main Plant & Machinery								
1	Pre-cooling Chamber	6 MT	1	Critical	25.00	25.00	4.50	29.50	As per cost norms
2	Staging Cold Room	30 MT	1	Critical	15.00	15.00	2.70	17.70	As per cost norms
3	Cold Storage	80 MT	1	Critical	0.10	8.00	1.44	9.44	As per cost norms
4	Washing-Sorting-Grading-Waxing - Packing Line	2 TPH	1 Set						
a	Fruit Washer	For 2 TPH Line	1	Critical	25.00	25.00	4.50	29.50	As per cost norms
b	Surface Dryer Fan Conveyor		1	Critical					
c	Round Fruit Grader		1	Critical					
d	Conveyor Belt		1	Critical					
e	Sorting Tables		2	Critical					
f	Wax Coating line		1	Optional					
g	Weighing Machines	1 unit x 50 KG, 1 Unit X 100 Kg	2	Critical					
h	SS Packing Tables		2	Critical					
i	Strapping Machine		1	Optional					
5	Pickle Line (Lemon)	5 TPD	1 set						
a	Washing tank, preparation tables, cutting/slicing machine	For 5 TPD capacity	1 Set	Critical	25.00	25.00	4.50	29.50	As per cost norms
b	Pickle blending machine, pickle filling machine, mixing tanks			Critical					
c	Lug capping machine			Critical					
d	Trolleys & elevators			Critical					

Plant & Machinery									
									Rupees in Lakh
Sr. No	Plant and Machinery	Capacity	Quantity	Critical/Optional	Cost Norm per unit	Total Cost (All Units)	Taxes	Total Eligible Cost	Remark
6	Pickle Bottle Steriliser			Optional	1.75	1.75	0.32	2.07	As per cost norms
7	Metal Detector			Critical	2.00	2.00	0.36	2.36	Eligible cost as per market rate analysis
8	Lab equipment's	Misc. (As required for plant operations)	1 Set	Optional	1.00	1.00	0.18	1.18	Eligible cost as per market rate analysis
	Subtotal (A)					102.75	18.50	121.25	
B	Utilities								
1	Transformer	120 KVA	1	Critical	1.73	1.73	0.31	2.04	As per cost norms
2	3 Phase electrification including power & controls cabling, PCC & MCC panel, Earthing, Internal Lighting, etc	Misc.	1 Set	Critical	6.00	6.00	1.08	7.08	Eligible cost as per market rate analysis
3	Solar Power system (On grid/Off grid)	80 KW	1	Optional	35.00	35.00	6.30	41.30	As per cost norms; Grant on solar system capped at Rs. 35 lakhs
4	DG Set	80 KVA	1	Critical	5.68	5.68	1.02	6.70	As per cost norms
5	Automatic Power Factor Controller	120 KVA	1	Critical	1.08	1.08	0.20	1.28	
6	Servo Voltage Stabilizer	120 KVA	1	Critical	1.15	1.15	0.21	1.36	
7	RO/ Water Softening Plant	1 KLPH	1	Optional	1.75	1.75	0.32	2.07	
8	Effluents Treatment Plant (ETP)	10 KLD	1 Set	Optional	2.00	2.00	0.36	2.36	
9	Sewage Treatment Plant (STP)	5 KLD	1 Set	Critical	3.75	3.75	0.68	4.43	
10	Dock Doors		1	Optional	7.00	7.00	1.26	8.26	

Plant & Machinery									
									Rupees in Lakh
Sr. No	Plant and Machinery	Capacity	Quantity	Critical/Optional	Cost Norm per unit	Total Cost (All Units)	Taxes	Total Eligible Cost	Remark
11	Dock Levellers		1	Optional					
12	Dock Shelter		1	Optional					
13	Weighbridge (Excluding Civil Works)	60 MT	1	Optional	7.00	7.00	1.26	8.26	
14	Fire Safety Equipment's	Misc.	1 Set	Critical	5.60	5.60	1.01	6.61	1% of technical civil area
15	Plastic Crates	20 KG	800	Critical	0.00275	2.20	0.40	2.60	As per cost norms
16	Plastic Pallets	1 MT	110	Critical	0.025	2.75	0.50	3.25	
17	Hand pallet truck	2 MT	1	Critical	0.30	0.30	0.05	0.35	Eligible cost as per market rate analysis
	Subtotal (B)					82.99	14.94	97.93	
C	Reefer Van	4 MT	1	Optional	11.56	11.56	2.08	13.64	As per cost norms
	Subtotal (C)					11.56	2.08	13.64	
	Grand Total (A+B+C)					197.30	35.51	232.81	

Annexure I: District wise Area and Production of Lemons for Maharashtra: 2021- 22

S.No.	District	Lemon		
		Area ('000 Ha)	Production ('000 MT)	Productivity (MT/Ha)
1	Ahmednagar	7.250	72.500	10.00
2	Akola	2.950	29.500	10.00
3	Amravati	0.524	4.178	7.97
4	Aurangabad	0.393	2.953	7.51
5	Beed	2.900	14.499	5.00
6	Bhandara	0.006	0.022	3.95
7	Buldhana	0.622	1.612	2.59
8	Chandrapur	0.015	0.105	7.00
9	Dhule	0.161	2.836	17.59
10	Gadchiroli	0.175	1.310	7.49
11	Gondia	0.008	0.043	5.23
12	Hingoli	0.057	0.670	11.75
13	Jalgaon	4.860	51.030	10.50
14	Jalna	0.577	5.965	10.34
15	Kolhapur	0.019	0.130	6.75
16	Latur	0.057	0.720	12.63
17	Nagpur	0.267	1.818	6.80
18	Nanded	0.332	3.320	10.00
19	Nandurbar	0.030	0.324	10.80
20	Nashik	0.213	1.201	5.65
21	Osmanabad	0.585	10.360	17.71
22	Palghar	0.018	0.147	8.32
23	Parbhani	0.608	3.100	5.10
24	Pune	0.700	10.500	15.00
25	Sangli	0.161	1.286	8.00
26	Satara	0.050	0.570	11.36
27	Sindhudurg	0.017	0.197	11.59
28	Solapur	4.962	36.666	7.39
29	Thane	0.005	0.051	11.08
30	Wardha	0.220	0.989	4.50
31	Washim	0.207	1.139	5.50
32	Yavatmal	0.086	0.598	6.95

Source: Area and Production Statistics, Ministry of Agriculture and Farmers Welfare: 2021-22

Web-link: <http://www.aps.dac.gov.in/Public/Report.aspx>

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