नाबार्ड

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कृषि और संबन्धित क्षेत्र निवेशों की इकाई लागत - 2025-26

Unit Costs on Investment in Agriculture and Allied Activities - 2025-26

राज्य - तेलंगाणा
State - Telangana

राष्ट्रीय कृषि और ग्रामीण विकास बैंक
National Bank for Agriculture and Rural Development

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NABARD

विज़न

ग्रामीण समृद्धि के लिए राष्ट्रीय विकास बैंक

Vision

Development Bank of the Nation
for fostering rural prosperity

मिशन

सहभागिता, संधारणीयता और समानता पर
आधारित वित्तीय और गैर–वित्तीय सहयोगों,
नवोन्मेषों, प्रौद्योगिकी और संस्थागत विकास के
माध्यम से समृद्धि लाने के लिए कृषि
और ग्रामीण विकास का संवर्धन

Mission

Promote sustainable and equitable agriculture and rural development through participative financial and non-financial interventions, innovations, technology and institutional development for securing prosperity

प्राक्कथन

राष्ट्रीय कृषि और ग्रामीण विकास बैंक (नाबार्ड), एक शीर्ष विकास वित्तीय संस्था के रूप में, कृषि और ग्रामीण विकास को प्रोत्साहित करने हेतु ऋण प्रवाह को सुविधाजनक बनाने और उसे बढ़ाने का दायित्व निभाता है.

नाबार्ड द्वारा राज्य स्तरीय यूनिट कॉस्ट समिति (SLUCC) की बैठकों का आयोजन किया जाता है, जिसका उद्देश्य विभिन्न कृषि निवेश गतिविधियों के लिए उपयुक्त इकाई लागत निर्धारित करना है, ताकि किसानों और कृषि उद्यमियों के लिए पर्याप्त ऋण उपलब्धता सुनिश्चित की जा सके. दिनांक 14 मई 2025 को नाबार्ड तेलंगाणा क्षेत्रीय कार्यालय, हैदराबाद में आयोजित राज्य स्तरीय यूनिट कॉस्ट समिति की बैठक में, राज्य सरकार के विभागों, बैंकिंग संस्थाओं, अनुसंधान संगठनों, प्रशिक्षण संस्थानों और स्टार्टअप्स जैसे प्रमुख हितधारकों के साथ व्यापक विचार-विमर्श के बाद, तेलंगाणा राज्य के लिए वित्तीय वर्ष 2025–26 हेतु इकाई लागत को अंतिम रूप दिया गया.

चालू वित्तीय वर्ष में खाद्य एवं कृषि प्रसंस्करण पर एक नया अध्याय भी शामिल किया गया है, जिसमें मुरमुरे, मिर्च पाउडर, हल्दी पाउडर, मिलेट प्रसंस्करण, कोल्ड प्रेस्ड ऑयल मिल, दाल मिल आदि जैसी गतिविधियों के लिए इकाई लागत निर्धारित की गई है. फार्म मशीनीकरण क्षेत्र में, सोलर ड्रायर को शामिल किया गया है, जिसके लिए जमीनी स्तर पर अच्छी संभावनाएं उपलब्ध है. किसान उत्पादक संगठनों के माध्यम से अपनाए जाने पर यह गतिविधि और भी अधिक व्यावहारिक सिद्ध हो सकती है. मत्स्य पालन क्षेत्र में, एक आकर्षक निवेश परियोजना के रूप में बैंकिंग वित्त प्राप्त करने की संभावनाओं की व्यवहार्यता और लाभप्रदता को दृष्टिगत रखते हुए, इस वर्ष, मरल हैचरी को एक नई गतिविधि के रूप में शामिल किया गया है. नवीकरणीय ऊर्जा क्षेत्र में, वन्य जीवों के कारण, विशेष रूप से बंदरों और जंगली सूअरों के कारण फसलों को होने वाले भारी नुकसान के संबंध में जमीनी स्तर पर प्राप्त फीडबैक के आधार पर, सोलर फेंसिंग को शामिल किया गया है. इसके अतिरिक्त, बाजार में उपलब्ध नवीनतम तकनीकों के आधार पर सोलर पावर्ड कोल्ड रूम को भी एक नई गतिविधि के रूप में शामिल किया गया है.

इस समिति द्वारा अनुमोदित लागतें केवल सांकेतिक प्रकृति की हैं. वित्तीय संस्थाएं और सरकारी एजेंसियाँ इन लागतों को क्षेत्रीय परिस्थितियों, तकनीकी व्यवहार्यता, वित्तीय लाभप्रदता और निवेश की बैंकेबिलिटी के आधार पर, आवश्यकतानुसार, संशोधित कर सकती हैं.

मैं, तेलंगाणा राज्य सरकार के विभिन्न विभागों, एसएलबीसी, बैंकों, अनुसंधान एवं प्रशिक्षण संस्थानों तथा अन्य सहयोगी एजेंसियों द्वारा इस पुस्तिका के प्रकाशन में प्रदान किए गए सहयोग और सहभागिता के प्रति हार्दिक आभार व्यक्त करता हूँ. मुझे पूर्ण विश्वास है कि यह दस्तावेज़ सभी हितधारकों — विशेष रूप से सरकारी विभागों और वित्तीय संस्थानों — के लिए एक मूल्यवान मार्गदर्शिका के रूप में उपयोगी सिद्ध होगा और राज्य में कृषि एवं संबद्ध क्षेत्रों में निवेश ऋण के प्रवाह को सुदृढ़ करने में सहायता करेगा.

बी उदय भास्कर
मुख्य महाप्रबंधक
हैदराबाद, तेलंगाणा

Foreword

National Bank for Agriculture and Rural Development (NABARD), as an Apex Development Financial Institution, is mandated to facilitate and enhance credit flow to foster agricultural and rural development.

NABARD has been convening meetings of State Level Unit Cost Committee (SLUCC) over the years, to determine appropriate unit costs for different agricultural investment activities, thereby ensuring sufficient credit availability. The Unit costs for 2025-26 for Telangana State were finalized by the SLUCC meeting convened on 14 May 2025 at NABARD Telangana Regional Office, Hyderabad after extensive consultations with various stakeholders viz. State Government departments, Bankers, Research organizations, Training establishments and Startups.

A new chapter on Food and Agro Processing has been included in current year with unit cost on activities viz; puffed rice, chilly powder, turmeric powder, millet processing, cold pressed oil mill, dal mill, etc. In the Farm Mechanization sector, Solar dryer has been included which is having good potential at the ground level and it would be more viable when taken up with FPOs. In Fisheries sector, Murrel Hatchery has been introduced this year in view of its feasibility and viability as an attractive investment project activity to avail finance from the bankers. In Renewable Energy, solar fencing has been included based on the ground level feedback regarding major crop loss on account of wild animal incursions in cultivated areas especially monkeys and wild boars. Further solar powered cold room is also added as a new activity based on latest technologies available in the market.

The costs approved by the Committee are indicative in nature, and financial institutions/government agencies may refine the costs based on field-level conditions, technical feasibility, financial viability, and bankability of the investments.

I extend my gratitude for the support and collaboration provided by the various government departments of Telangana, SLBC, Banks, Research / training establishments and other agencies who have contributed in bringing out this booklet. I trust that this document will serve as a valuable guide for all stakeholders, including government departments and financial institutions, and will improve the flow of investment credit in Agriculture and allied sectors in the State.

B Uday Bhaskar
Chief General Manager
TGRO, Hyderabad

Contents

Sector 1
Minor Irrigation

Telangana is endowed with two major rivers, the Godavari and the Krishna, along with their tributaries. The state is divided into two primary basins and 13 sub-basins. The Godavari basin includes eight sub-basins covering districts such as Nizamabad, Adilabad, Nirmal, Jagtial, Karimnagar, Peddapalli, Warangal Rural, Jayashankar Bhupalpally, Mulugu, Bhadradri Kothagudem, Khammam, and Nalgonda.

The Krishna basin comprises five sub-basins flowing through the districts of Narayanapeta, Wanaparthy, Jogulamba-Gadwal, Nagarkurnool, Nalgonda, and Suryapeta. Additionally, there are two smaller basins, situated between the Godavari and Krishna rivers, covering a limited area. Several tributaries also contribute to these major rivers.

Out of 620 assessment units (Mandals), 32 units (5%) have been categorized as 'Over Exploited', 13 units (2%) as 'Critical', 85 units (14%) as 'Semi-Critical' and 490 units (79%) as 'Safe'. There is no 'Saline' category of assessment unit in the state.

The Ground water resources for the state have been assessed watershed-wise and apportioned mandal-wise. Total Annual Groundwater recharge of the State has been assessed as 20.40 bcm and Annual extractable Ground Water resource as 18.44 bcm. The Annual Ground Water Extraction is 8.47 bcm and Stage of Ground Water Extraction is 46%.

Major activities under this sector include constructing bore wells, dug wells, pipelines, micro-irrigation units, deepening of wells, and purchasing pump sets.

The erstwhile Andhra Pradesh Water, Land and Trees Act, 2002 has been adapted to the State of Telangana, under section 101 of the Andhra Pradesh Reorganization Act, 2014 (Central Act 6 of 2014) vide. the Notification issued by Panchayat Raj & Rural Development (RD.II) Department, dated 31.01.2015. Accordingly, the Telangana State Water, Land and Trees Authority was set up to (i) promote water conservation and Tree cover (ii)promote protection and Conservation of water sources, and matters connected there with and (iii)regulate the exploitation and use of ground and surface water as envisaged in the Act. All ground water resources in the State shall be regulated by the Authority, subject to any general or special directions issued in this behalf by the State Government.

In this backdrop, NABARD has revised the unit cost in respect of activities falling under minor irrigation for FY 2025-26.

I - Dugwells				
Model 1 - Dugwell in Hardrock Areas				
1. Basic Information		Outer Dia.(m)		6.90
Suitable in hard rock areas- Granites and Granitic Gneisses of, Basalts etc., where ground water level is within 10 m bgl and weathered portion is 3-5 m bgl		Inner Dia.(m)		6.00
		Depth of the Well(m)		12.00
		Steining of the well(m)		5.00
		Thickness of Steining (m)		0.50
2. Cost of Excavation				
Depth (m)	**RMT**	**Quantity (m^3)**	**Rate/ m^3 (₹)**	**Amount (₹)**
0 to 2	2	74.80	308.88	23104
2 to 4	2	74.80	391.30	29269
4 to 6	2	56.56	492.74	27869
6 to 8	2	56.56	609.08	34450
8 to 10	2	56.56	734.36	41535
3. Cost of Steining		45.00	56.56	869.24
4. Dewatering Charges				5000
Total Cost (Rounded off)				**256000**
Minimum Benefitting Area in Acres		2.23		
Repayment		5-7 years including grace period 11 months		
Model 2 - Dugwell in Hardrock Areas				
1. Basic Information:		Outer Dia.(m)		5.90
Suitable in hard rock areas- Granites and Granitic Gneisses of, Basalts etc., where ground water level is within 10-12 m bgl and weathered portion is > 5-7 m bgl		Inner Dia.(m)		5.00
		Depth of the Well(m)		14.00
		Steining of the well(m)		5.00
		Thickness of Steining(m)		0.45

2. Cost of Excavation				
Depth (m)	**RMT**	**Quantity (m^3)**	**Rate/m^3 (₹)**	**Amount (₹)**
0 to 2	2	54.68	308.88	16889.56
2 to 4	2	54.68	391.30	21396.28
4 to 6	2	39.27	492.74	19349.9
6 to 8	2	39.27	609.08	23918.57
8 to 10	2	39.27	734.36	28838.32
10 to 12	2	39.27	869.24	34135.05
12 to 14	2	39.27	1020.12	40060.11
3. Cost of Steining		38.52	1000.00	38529.00
4. Dewatering Charges				5000
Total cost (Rounded off)				**228200**

Minimum Benefitting Area in Acres	1.98
Repayment	5-7 years including grace period 11 months

Model 3 - Dugwell in Hardrock Areas		
1. Basic Information	Outer Dia.(m)	5.90
Suitable in hard rock areas- Granites and Granitic Gneisses of Basalts etc., where ground water level is within 10-12 m bgl and weathered zone is >7 m bgl	Inner Dia.(m)	5.00
	Depth of the Well(m)	16.00
	Steining of the well(m)	5.00
	Thickness of Steining(m)	0.45

2. Cost of Excavation				
Depth (m)	**RMT**	**Quantity (m^3)**	**Rate/m^3 (₹)**	**Amount (₹)**
0 to 2	2	54.6865	308.88	16892
2 to 4	2	54.6865	391.30	21399
4 to 6	2	39.275	492.74	1935
6 to 8	2	39.275	609.08	2392

8 to 10	2	39.275	734.36	28842
10 to 12	2	39.275	869.24	34139
12 to 14	2	39.275	1020.12	40065
14 to 16	2	39.275	1174.20	46117
3. Cost of Steining		38.5288	1000.00	38529
4. Dewatering Charges				5000
Total Cost (Rounded off)				**274300**
Minimum Benefitting Area in Acres		2.35		
Repayment		5-7 years including grace period 11 months		

Model 4 – Hardrock Areas
Sedimentary formations, Sand stones & Lime stones
(Areas of Karimnagar, Nalgonda and Warangal - Cuddapah and Kurnool)

1. Basic Information	Outer Dia.(m)	4.90
Suitable in hard rock areas- Weathered Sand stones, Limestone, Laterites etc. where ground water level is within 10 m bgl	Inner Dia.(m)	4.00
	Depth of the Well(m)	12.00
	Steining of the well(m)	5.00
	Thickness of Steining(m)	0.45

2. Cost of Excavation

Depth (m)	RMT	Quantity (m^3)	Rate/m^3 (₹)	Amount (₹)
0 to 2	2	37.72	308.88	11651
2 to 4	2	37.72	391.30	14760
4 to 6	2	25.136	492.74	12386
6 to 8	2	25.136	609.08	15310
8 to 10	2	25.136	734.36	18459
10 to 12	2	25.136	869.24	21849
3. Cost of Steining		31.4593	1000.00	31459
4. Dewatering Charges				5000

Total cost (Rounded off)				**130900**
Minimum Benefitting Area in Acres	1.19			
Repayment	5-7 years including grace period 11 months			
Model 5 – Dugwells in Alluvial Areas Adjoining areas of Krishna, Godavari river, other rivers/Streams and Head Reaches of Canal command areas)				
1. Basic Information	Outer Dia.(m)			3.20
Suitable in Alluvial & Hard rock areas - Krishna, Godavari, other rivers/Streams and Head Reaches of Canal Command areas, where ground water level is within 6 m bgl	Inner Dia.(m)			3.00
	Depth of the Well(m)			14.00
	Steining of the well(m)			12.00
	Thickness of Steining(m)			0.10
2. Cost of Excavation				
Depth (m)	**RMT**	**Quantity (m^3)**	**Rate/ m^3 (₹)**	**Amount (₹)**
0 to 2	2	16.087	280.49	4512
2 to 4	2	16.087	339.35	5459
4 to 6	2	16.087	411.79	6624
6 to 8	2	16.087	484.53	7795
8 to 10	2	16.087	557.45	8968
10 to 12	2	16.087	637.40	10254
12 to 14	2	16.087	729.08	11729
3. Cost of Lining		13.640	5000.00	68200
4. Dewatering Charges				5000
Total cost (Rounded off)				**128600**
Minimum Benefitting Area in Acres	1.49			
Repayment	5-7 years including grace period 11 months			
***Note:** Dug wells of 8-10 m depth will be sufficient, however depth up to 14 m is given to take care of situations where water level is deep.				

II – Drilled wells			
Model 1 – Bore Well in Hard Rock Areas (Fresh, Semi Weathered and Weathered Granites, Gneisses, Granitic Gneisses, Schist etc.)			
Particulars	**Design (₹/m)**	**Rate (₹)**	**Amount (₹)**
1. Drilling of bore well by down the hole hammer (DTH) drilling to a finished depths specified and reaming the bore to the required depth and diameter to suit lowering of 7" dia (180 mm) internal diameter casing pipe with coupling, fixing of pipes, flushing the bore wells at an average 150 psi inclusive of transportation from point to point, crew charges, consumables, shifting of rig and all other charges etc. in the entire district.	Diameter 180 mm Depth 120 m	700	84000
GST @12% on Drilling			10080
2. Casing -PVC casing pipe: Pressure-6 kg/cm2, Diameter 180 mm	Length 20 m	884	17680
3. Well cap (PVC), Diameter 180 mm		**200**	**200**
Sub total			17880
GST @ 18% on casing and Well Cap			3218
Total cost (Rounded off)			**115200**
Minimum Benefitting Area in Acres	1.68		
Repayment	3-5 years including grace period 11 months		

Model 2 – Tube wells in Soft Formations-Tube well 180 mm (7") (Fresh, Semi weathered & Weathered Sandstones, Lime stones, Alluvium etc.)			
Particulars	**Design (₹/m)**	**Rate (₹)**	**Amount (₹)**
1. Drilling: Drilling of tube well with Rotary rig to finished dia of 311 mm (12 ¼") with a pilot bore of suitable dia may be 216 mm (8 ½") and then reaming to the finished diameter in all formations such as Alluvia, Clay and Sand stones etc., including installation charges for 180 dia (OD) PVC casing threaded pipes cost of consumables, cost of pebble gravel / clay balls, packing around the casing pipes, tube well development charges, transportation of rig and all other charges etc., (excluding cost of casing pipes, well cap, bottom dummy and clamp set) as recommended by the site incharge officers.	Diameter 180 mm Depth 120 m	1100	132000
GST @12% on Drilling			15840
2. PVC Plain Casing Pipe; Pressure- 10 kg/cm2, Diameter- 175 mm	Length 20 m	1408	168960
3. PVC casing pipe (Slotting) Pressure- 10 kg/cm2, Diameter- 175 mm Slot size-1/8" or 1/16"	Length 60 m	500	30000
4. Top Dummy suitable to 180 mm (OD) PVC pipe	1 No.	427	427
5. M.S Clamp set suitable to 180 mm (OD)PVC pipe	1 No.	500	500
6. Bottom Dummy (CI) suitable to 180 mm (OD) PVC casing pipe	1 No.	450	450
Sub total			200337
GST @ 18% for items S No 2-6			36061
Total			236398
7. Compressor development charges with transportation	2 hours	3000	6000

Total cost (Rounded off)			**390300**
Minimum Benefitting Area in Acres	7.45		
Repayment	5-7 years including 11 months grace period		
Model 3 – Filter Points in Alluvial areas - Filter point 125 mm			
Particulars	**Design (₹/m)**	**Rate (₹)**	**Amount (₹)**
1. Drilling of 200 mm dia. bore in BC and sandy, loamy soils including conveyance of HB set/ mini rotary rig work spot and all other drilling operations including incidental charges and inserting 125 mm dia. (OD) PVC casing development charges and all other charges as directed by the site in charge officer (excluding cost of casing pipe, couplings, cap and clamp set etc.)	Diameter 125 mm Depth 20 m	700	14000
GST @12% on Drilling			1680
2. Casing - PVC plain casing pipe - Pressure 10 kg/cm2; Diameter- 125 mm	Length 14 m	864	12096
3. PVC casing pipe (Slotting)- Pressure -10 kg/cm2; Diameter- 125 mm	Length 6 m	964	5783
4. Well cap suitable to 125mm. (OD) PVC pipe	1 No.	525	525
5. M.S Clamp set suitable to 125mm (OD)PVC pipe	1 No.	768	768
6. Bottom Dummy (CI) suitable to 125mm (OD) PVC casing pipe	1 No.	640	640
Sub total			19812
GST @ 18% for items S No 2-6			3566
Total cost (Rounded off)			**39100**
Minimum Benefitting Area in Acres	0.89		
Repayment	2- 3 years including 11 months grace period		

III – Agricultural Pump sets						
Model 1 – Complete Pumping System					**(₹)**	
Sl no	**Item**	**Electric**			**Diesel**	
		3 HP	**5 HP**	**7.5 HP**	**5 HP**	**8 HP**
1	Prime Mover & Pump	24000	28000	34597	33990	46499
2	Foot Valve	410	537	665	535	684
3	Suction & Delivery Pipe	1196	1595	1395	1356	1808
4	Bend (Suction)	246	271	265	271	277
5	Bend (Delivery)	246	269	266	267	274
6	Starter	2464	2464	2711	0	0
7	Capacitor	370	616	616	0	0
8	Main Switch	370	370	370	0	0
9	Switch Board	678	678	678	0	0
10	Bolts & Miscellaneous	62	68	68	234	246
11	Earthing	554	554	554	0	0
12	Coupling/ Clamps	0	0	0	402	431
13	Water cooling system	0	0	0	986	1109
14	Transport	370	370	616	616	410
15	Installation	616	616	678	616	739
T O T A L		31582	36408	43479	39273	52477
GST @ 12 percent		3790	4369	5217	4712	6297
Total cost (Rounded off)		**35400**	**40800**	**48700**	**44000**	**58800**
Repayment		3-5 years including 11 months grace period				
Note: Repayment of only Pump set is given as individual unit. If it is given with well, then Repayment period of well is applicable.						

Model 2 – Submersible Pump sets				(₹)	
Sl no	**Particulars**	**3 HP**	**5 HP**	**7.5 HP**	**10 HP**
1	Pump set	32800	36500	41000	48000
2	Cable	5022	4934	6016	6520
3	GI Pipe	10047	13621	17580	21983
4	Pressure Gauge	400	400	400	400
5	Non Return Valve	943	943	1061	1147
6	Starter & Panel Board	19400	19900	19900	24350
7	Capacitor	708	708	708	708
8	Transport	1000	1000	1000	1000
9	Installation	1979	2598	3464	3464
GST @ 12 percent		8676	9672	10935	12909
Total cost (Rounded off)		**81000**	**90300**	**102100**	**120500**
Repayment		3-5 years including 11 months grace period			
Repayment of only Pump set is given as individual unit. If it is given with well, then Repayment of well is applicable.					

IV – Water Conservation System				
Model 1 – Sprinkler Irrigation System (Pipe dia 75 mm, 1.0 ha)				
Sl no	**Particulars**	**Rate (₹)**	**Quantity**	**Amount (₹)**
1	HDPE Pipes with quick action coupler (2.5 kg/cm2) of 6m long	663	25	16585
2	Sprinkler coupler with foot baton assembly	434	5	2170
3	Sprinkler nozzles (1.7 to 2.8 kg/cm2)	372	5	1860
4	Riser pipe 20mm diameter x 75cm long	124	5	620
5	Connecting nipple	310	1	310
6	Bend with coupler 900	310	1	310
7	Tee with coupler	310	1	310
8	End plug	124	2	248
9	Basic system cost per ha			22413
GST @ 12%				2690
Total cost (Rounded off)				**25100**
Repayment	3-5 years including 11 months grace period			
Model 2 – Rain gun				
Sl no	**Particulars**			**Amount (₹)**
1	Rain gun with nozzle (3-4 kg/cm2), discharge of 7 lps to 19 lps and radius of 31 m to 50 m, pipe diameter 75 mm, and related systems			31629
2	Booster Pump set (5 HP) & Misc.			35000
3	**Total cost (Rounded off)**			**66600**
Repayment	3-5 years including with 11 months grace period			

Model 3 – Drip Irrigation System (₹ per ha.)							
Sl no	**Crop**	**Spacing (m)**	**Type of Drip**	**Amount (12 mm)**	**Amount (16 mm)**	**Repay-ment (Yrs.)**	**Gestation (Yrs.)**
1	Mango/ Sapota	10 x 10	Online	28858	33500	4	01
2	Pomegranate	4.50 x 2.70	Online	48537	56326	10	06
3	Papaya	1.80 x 1.50	Online	90453	104426	3	01
4	Banana	1.80 x 1.50	Inline	87348	104550	3	01
5	Vegetables	0.60 x 0.45	Inline	118863	131028	4	06 (months)
6	Rose/ Jasmine/ Cotton/ Mulberry/ Medicinal Plants	[(0.60 +1.20) x 0.60]	Inline	84193	91385	5	01
7	Tobacco (Light soils)	1.20 x 0.50	Inline	109922	131028	4	06 (months)
8	Sugarcane	[(0.75 + 1.50) x 0.60]	Inline	68930	80520	3	01
9	Oil Palm	9 x 9	Online	47700	53468	7	11 (months)
10	Oil Palm	9 x 9	Microjet	48600	54900	7	05
11	High Density- Mango, Guava, pomegranate , apple, ber, Papaya, date palm	5 x 3	Online	-	52960	3	01
12	Casuarina, Drumstick	2.50 x 2.50	Online	-	82260	3	01
13	Mulberry	1.80 x 1.80	Inline	-	91365	5	01

Model 4 – Pipeline or Distribution System			
Area in ha/Acre	**Size of the Pipe**	**Amount (₹)**	
		RPVC6 kg/cm2	**RPVC6 kg/cm2**
1.00 ha/ 2.50 acre	Length-150 m Dia 63 mm	₹14500 with accessories @ ₹ 80/m	₹18500 with accessories @ ₹ 95/m

V – Artificial Recharge of Ground water				
Model 1 – Artificial recharge of dried /seasonally functioning borewell				
Sl no	**Particulars**	**Qty**	**Rate (₹)**	**Amount (₹)**
1	Earth Work excavation around the bore well (JCB) hours	3.50	1500	5250
2	Boulders (8 to 12 inches size) (Granitic/ Hard Material/ Field) to be filled up to 1.20 m	10.80	625	6750
3	80-40 mm size jelly to be filled up to 0.40 m	3.60	781	2812
4	40-20 mm size jelly to be filled up to 0.40m	3.60	1237	4455
5	Charcoal layer of 0.1 m covered with nylon mesh	0.90	4000	3600
6	Coarse Sand to be filled up to 0.70 m	6.30	869	5473
7	Casing pipe with holes including concrete base	1.00	3200	3200
8	Aquamesh in meters	50.00	50	2500
9	Nylon mesh 6 m	1.00	420	420
10	Size Stone masonry for safe wall 250 stones	4.50	5000	22500
11	Cement including transport per bag	3.00	500	1500
12	Casing pipe holding bracket with bolts and nuts/clamp	1.00	520	520
13	Labour for filling the materials (person days)	9.00	425	3825

Sl no	Particulars	Qty	Rate (₹)	Amount (₹)
14	Mason and labour for making protection wall (1 Mason per day cost Rs. 625, 1 Labour per day Rs. 425)-2 days	2.00	1050	2100
15	Diversion drain (M^3) using machine	10.00	125	1250
Total cost (Rounded off)				**66200**
Note: In case existing casing pipe is used and drilling of holes is carried out, ₹3200 could be saved making the unit cost ₹63000.				
Techno economic parameters				
a	**Average Annual Rainfall:**	800 mm		
b	**Catchment:**	5 ha		
c	**Run-off coefficient:**	0.25		
d	**Expected runoff:**	10000 m^3		
e	**Unit Cost:**	₹66200		
f	**Margin:**	20%		
g	**Repayment**	4 years (half yearly)		

Model 2 – Artificial recharge of dried open/dug-well

Particulars	Measurement in m			Volume (M^3)	Rate/ M^3 (₹)	Labour (₹)	Material (₹)	Amount (₹)
	Length	Width	Depth					
Earth Work								
Diversion Drain	15.00	1.00	0.75	11.25	248.11	2791	0	2791
Silt Trip	2.50	2.50	1.20	7.50	248.11	1861	0	1861
Middle Drain	3.00	1.00	0.75	2.25	248.11	558	0	558
Middle Drain	3.00	1.00	0.75	2.25	248.11	558	0	558
Water Recharge pit	4.00	4.00	1.50	24.00	248.11	5954	0	5954
Pipeline Trench	6.00	0.50	0.90	2.70	248.11	669	0	669
150 mm Length – 6 m						0	1400	1400

Misc.						0	600	600
						11834	2000	13834
Total cost (Rounded off)								**13800**

Techno economic parameters		
a	**Average Annual Rainfall**	800 mm
b	**Catchment**	5 ha
c	**Run-off coefficient**	0.25
d	**Expected runoff**	4000 m^3
e	**Diameter**	6 m
f	**Depth of well**	15 m
g	**Volume of storage**	847.80 m^3
h	**Command area**	0.40 ha
i	**Unit Cost**	₹66200
j	**Margin**	20%
k	**Repayment**	3 years (half yearly)

Model 3 – Construction of Recharge Shaft in the upstream of Check Dam

Sl no	Particulars	Quantity	Rate (₹)	Amount (₹)
1	Excavation in all kinds of soil including stones, formation of service road in m^3	100	105	10500
2	Drilling of bore well 250 mm (m)	40	439	17560
3	Supply a fixing of slotted PVC pipe of 180 mm & 10 Kg / Cm^2	20	1517	30340
4	Excavation of Recharge Pit, providing graded media and supplying and placing Polypropylene Mono filament and Iron mesh of 2 mm/3 mm perforations	1	55900	55900
5	Construction of protection wall with all materials, centring, laying concrete, compacting, finishing etc.,	1	41800	41800
Total cost (Rounded off)				**156000**

Special Terms of Financing:

Minor Irrigation Schemes: (DW, TW, BW, DOW, PUMP SETS etc.)

- Ground water development in the State is regulated under the provisions of TGWALTA, 2014 and the development of new wells in the State has to be in accordance with the provisions of the Act.
- TGWALTA, 2014, specifies Well spacing norms, maximum drilling depth and has made RWH structures mandatory for using GW for irrigation.
- Bank shall ensure that the financing of new ground water structures is implemented in “Safe "/ “Semi Critical” mandals only.
- The list of District-wise over-exploited and critical mandals (in which the ban on exploitation of ground water is extended) as notified in the Act is given below:

Over Exploited areas		
Sl no	**District**	**Mandal**
1	Adilabad	Adilabad Urban, Mavala
2	Medchal Malkajgiri	Balanagar, Bachpalle
3	Nizamabad	Nizamabad South
4	Hyderabad	Charminar, Golkonda, Saidabad, Asifnagar, Ammerpet, Himayatnagar, Khairatabad, Amberpet, Secunderabad, Shaikpet, Musheerabad
5	Rangareddy	Hayathnagar, Serilingampally, Saroornagar
6	Mahabubnagar	Balanagar
7	Sangareddy	Patancheruvu
8	Nalgonda	Munugode, Chityala
9	Wanaparthy	Veepangandla
10	Yadadri Bhuvanagiri	Narayanapur, Alair, Choutuppal, Atmakur_M, Rajapet
11	Khammam	Raghunadhapalem
12	Siddipet	Dubbak

Critical areas		
Sl no	**District**	**Mandal**
1	Rangareddy	Chowdergudem, Rajendranagar
2	Hyderabad	Nampally, Maredpally, Bandlaguda, Bahadurpura
3	Medchal Malkajgiri	Muduchinthalapally, Keesara, Malkajgiri
4	Medak	Nizampet
5	Bhadradri Kothagudem	Kothagudem, Sujathanagar
6	Yadadri Bhuvanagiri	Mootakondur
7	Jangaon	Jangaon

- Further, bank shall ensure that the borrower has obtained approval from State Ground water Department for drilling of the borewell at the proposed site. The approval can be obtained from the online portal https://gwrms.telangana.gov.in.
- The design and cost of the ground water structures shall be as per the recommendations of Unit cost Committee.
- The minimum spacing to be maintained between dug wells / bore wells, minor irrigation works shall be as indicated below:

a.	Dug wells to dug well with or without pump set	150 m
b.	Bore wells to bore well with pump sets	250 m
c.	Between Dug wells & Bore wells	215 m

- Development of Wells (DOW): The spacing norms (as per 3 above) between wells (including wells for drinking purpose) may also be adhered to under DOW.
- Power Supply: Before approving loan for electric pump sets, the bank shall satisfy itself that the village is electrified.
- Minimum acreage and sale of water:
  - It is necessary that the beneficiary has the minimum area of land as prescribed with the model to be brought under irrigation to ensure

viability of investment and repayment of loans in the prescribed periods.

- If the beneficiary's own irrigated area is smaller than which can be irrigated by well/bore well, the bank may advise the beneficiary that he can sell surplus water to neighboring farms.

- Selection and Installation of Pump sets:
  - The bank shall ensure that the pump sets that are financed under the scheme are selected and installed as per BIS 10804.
  - Bank shall also ensure that the spacing criteria, as stipulated above, are adhered to for loans for pump sets as well.
  - Wherever loans are advanced for standby pump set, bank may ensure that the standby unit is also selected as per BIS 10804 and also that the loans, both for existing pump set and the standby unit, are recovered together within the normal recommended period of pump sets which is 9 years.
  - Where higher hp pump set is required, for use other than irrigation, with common prime mover, total hp of the pump set selected for agricultural shall not exceed 1.5 times the hp required for irrigation purpose subject to a maximum of 10 hp.
- Capacitors: The Electric motor financed should always be provided with a starter and a capacitor matching the motor. The following KVAR rating capacitor should be used:

Below 3 hp	1 KVAR	3 hp to 5 hp	2 KVAR	3 hp to 7.5 hp	3 KVAR

- **After Sales Service:** Bank shall ensure that adequate after sales service and repair facilities are provided by the manufacturers / dealers installing the pump set on beneficiaries' wells and that such service is free/ of nominal charge during the first year of installation.

Sprinkler System

- The bank should ensure that adequate water is available to cover the area.

- The design of the sprinkler system should be done for the crop by a competent agency taking into consideration source and availability of water, wind velocity in different seasons and suitability of the system for proposed cropping pattern.
- A plan of the area showing the layout of the system and cost estimate of the system should be prepared by the implementing agency.
- The implementing agency should offer guarantee for the operation of the system for one/two years against any defect either manufacturing / working or installation. The firm should offer regular post sales-service for maintenance.
- The components of the system should conform to the BIS specification:
  - With Aluminum pipes conforming to IS-7092 of 1976 (Part-I) and IS-7092 (Part-I I) of 1987.
  - With HDPE pipes conforming to IS-14151 (Part-I) and IS-14151 (Part-II) of 1994.

Drip System

- The Bank should ensure that only a competent and approved firm installs the system.
- The installing agency should assess the water requirement of each plant and design the system accordingly. The bank should insist for a layout map showing the benefiting area and the layout of the system drawn to a proper scale.
- Availability of water as per requirement and of suitable chemical and physical quality for smooth operation of the system should be ensured.
- The bank should insist upon the installing agency to prepare a plan as also layout and design of the system and also indicate cost of each item.
- The installing agency should guarantee for the operation of the system for minimum of 2 years and also ensure timely and proper post sales-service for the satisfactory working of the system.

Sector 2
Land Development

With the focus shifting towards sustainable agriculture, the role of land development, soil conservation, and watershed development has become imperative. Land development involves interventions that enhance water harvesting and input use efficiency.

Under the Rural Infrastructure Development Fund (RIDF), NABARD assists the State Government with irrigation projects. New command areas under upcoming irrigation projects show great potential for credit flow for land development necessitating higher credit support from banks. In view of this, NABARD revised the unit cost for investment items in land development for the year FY 2025-26.

Sl no	Item of Investment	Amount (₹)	Repayment (Yrs.)	Gestation period (Yrs.)
1	Contour Bunding (Slope 2-4%; area of land: 1 acre (4040 sq. m)	23900	3	1
2	Gully plugging with stone (5 m)	8080	3	1
3	OFD works for 2-3% slope (1 acre)	54800	3	1
4	Reclamation of saline/ alkaline soils (1 acre)	27300	3	1
5	NADEP compost unit (10' x 6' x 3') including operational cost	34100	3	1
6	Farm Ponds 10 m x 10 m x 2.5 m (by machine)	64300	5	1
7	Farm Ponds 18 m x 18 m x 3 m (by machine)	155200	5	1
8	Tiny vermicomposting unit (1.8 TPA)	39700	5	1
9	Mini vermicompost unit (20 TPA; 3 units with 4 cycles of 75-85 days)	277800	5	1
10	Barbed wire fencing (cement poles) for 100 m	65300	5	1
11	Chain linked diamond mesh wire fencing (cement poles) for 100 m	83000	5	1
12	Tank silt application (only transport & application) - 0.02 m-ha	36300	5	1
Instalment: 1 year grace period with annual instalments				

Special Terms of Financing:

- Banks may finance land development activities as per the cost norms indicated in the relevant Central scheme. Physical norms for land development works to be decided as per local rates, DSR/SOR of State Govt/Department.
- The bank shall satisfy itself that the required technical guidance and supervision is made available by the concerned department of the State Government.
- Field to field level irrigation is discouraged and separate field channels are used to convey irrigation water to various parts of holding.

Sector 3
Integrated Farming System

Integrated farming is one of the effective sustainable agricultural practices, where crop cultivation is taken up along with allied activities (horticulture, animal husbandry, fisheries, and poultry) which complement each other. Various schemes are being implemented by GoI as well as Telangana State Government for sustainable agriculture. The need of the hour is the convergence of these schemes for supporting farmers in adopting sustainable agriculture in the state.

Efforts should be made to promote integrated farming in watershed areas by coordinating with various line departments. This includes micro irrigation, multi cropping and integrating livestock farming with crop production to enhance farm productivity and sustainability.

As Integrated Farming Systems enhances farmers' income by diversifying their sources of revenue, reducing risks associated with monocropping, and optimizing the use of available resources, emphasis should be placed on promoting integrated farming models among the farmers and the same needs to be actively financed by financial institutions.

NABARD has included the unit cost of three models for integrated farming catering to the demographic needs of northern, central and southern Telangana for FY 2025-26.

Model I – Central Telangana

Farming System	Area (acre)
Crops (Banana and Groundnut)	0.50
Dairy (2 Buffalo Unit)	0.025
Sheep rearing (20:1)	0.0125
Fodder crops	0.25
Farm Pond (Existing)#	0.10
Agro-Silviculture (Forest trees)	0.1125
Total	**1.00**
Backyard poultry (4 batches of 50 Birds each)	50 Sq feet

Particulars	Rate (₹)	Amount (₹)
a) Fixed costs		
Cost of establishment of Buffalo unit (1+1)	98000	196000
Cost of establishment of Sheep rearing unit (20+1)	14000	294000
Banana – 0.50 acre	108000	54000
Agro-Silviculture (Forest trees) – 0.1125 acre	48000	5400
Cost of backyard unit shed, equipment (50 birds)-sq ft	380	19000
Sub total		**568400**
b) Recurring cost		
Banana - 0.50 acre	28000	14000
Groundnut (Intercrop) - 0.50 acre	26000	13000
Working capital for Buffalo unit (1+1)	16000	32000
Working capital for sheep unit (20+1)	1500	31500
Working capital for Backyard poultry (50 birds)- sq ft	200	40000
Sub total		**130500**
Total cost (Rounded off)		**699000**

 # Cost of construction of new farm pond (20 x 20 m) with lining will be approximately ₹ 1.60 lakh. Farm Pond can be used for fish rearing for additional income. The economics of the same can be referred in Fisheries chapter.

Model II – Southern Telangana

Farming System		Area (acre)
Crops (Paddy, Maize)		0.75
2 Buffalo unit		0.025
Fodder crops		0.10
Composting and vermiculture		0.025
Brinjal, Black gram		0.10
Total		**1.00**
Backyard Poultry (4 batches of 50 Birds each)		50 sq feet
Particulars	**Rate (₹)**	**Amount (₹)**
a) Fixed costs		
Cost of establishment of Buffalo unit (1+1)	98000	196000
Cost of backyard unit shed, equipment etc.(50 birds/sq ft.)	500	25000
Sub total		**221000**
b) Recurring cost		
Kharif Paddy Cost of Cultivation - 0.50 acre	44000	22000
Rabi Paddy Cost of Cultivation - 0.50 acre	44000	22000
Brinjal Cost of Cultivation - 0.10 acre	48000	4800
maize Cost of cultivation - 0.25 acre	34000	8500
Black gram cost of cultivation - 0.10 acre	19000	1900
Working capital for Buffalo unit (1+1)	20000	40000
Working capital for Backyard poultry – 200 nos	250	50000
Sub total		**149200**
Total cost (Rounded off)		**370000**

Model III – Northern Telangana

Farming System		Area (acre)
Crops (Paddy, tomato or red gram, Ridge gourd)		0.617
Animal Husbandry (2 Buffalo unit)		0.049
Fodder crops		0.317
Composting and vermiculture		0.0247
Total		**1.00**
Particulars	**Rate (₹)**	**Amount (₹)**
a) Fixed costs		
Cost of establishment of Buffalo unit (02)	98000	196000
Sub total		**196000**
b) Recurring cost		
Kharif Paddy Cost of Cultivation - 0.617 acre	45000	27765
Rabi Paddy Cost of Cultivation - 0.617 acre	46000	28382
Red gram Cost of Cultivation - 0.049 acre	25000	1225
Tomato Cost of cultivation - 0.049 acre	48000	2352
Ridge guard (intercrop) cost of cultivation - 0.025 acre	32000	800
Working capital for Buffalo unit (02)	25000	50000
Sub total		**110500**
Total cost (Rounded off)		**306500**

Special Terms of Financing:

- The suggested models are illustrative only. The project may be scaled up by expanding area/ increasing activities depending on local agro- climatic conditions in consultation with local KVKs/line departments.
- Fisheries/other animal husbandry activities can be taken up for additional income with proper training and guidance.
- Crop diversification is recommended to ensure varied sources of income.

Sector 4
Plantation & Horticulture

Telangana's diverse Agro-climatic zones and fertile soils make it highly suitable for the cultivation of a wide range of horticultural crops, including fruits, vegetables, spices, plantation crops, and flowers. Key areas for fruit cultivation include Siddipet, Mahabubnagar, and Nalgonda, where crops like mango, guava, and pomegranate are extensively grown.In 2022-23, the area under horticulture crops in the state was 12.12 lakh acres producing 53.06 lakh MT. mango, sweet orange, acid lime, guava, pomegranate, tomato, brinjal, oil palm, cashew, ilies, and turmeric are the major horticulture crops cultivated in the state. In the backdrop of this NABARD has revised unit cost of plantation & horticulture for crops FY 2025-26.

Sl no	Crops	Unit cost per acre (in ₹)	Spacing (m)	Plant Population (in Nos.)	Re-payment (Yrs.)	Unit Cost Capitalized (Yrs.)
1	Mango	151900	5 x 5	160	9	5
2	Mango	169300	4 x 3	333	8	3
3	Citrus Species	95700	6 x 6	110	10	5
4	Guava	159800	3 x 3	440	7	3
5	Pomegranate	135000	5 x 3	270	6	3
6	Tissue Culture Banana	112600	1.65 x 1.65	1470	2-3	1
7	Aonla (Amla)	52800	6 x 6	110	8	4
8	Custard Apple	140500	5 x 2.5	320	8	3
9	Drumstick	60000	1.8 x 1.8	1235	3	1
10	Oil palm (cost/ac)	135000	9 x 9 x 9	57	9	4
11	Dragon Fruit	661500	2.5 x 2.5	2560	6	2
12	Vegetable cultivation under Pandal system per ha	350024	-	-	-	-

	Crop : Mango					
	Varieties : Banganapalli, Mallika, Neelam, Totapuri					
	Unit / Area (sq. m)	**4000**	**1 Acre**			
	Spacing (m)	**5 x 5**				
	No. of Plants	**160**				
	System of Planting/ Layout	**Square**				
						(₹)
Sl no	**Particulars**	**Yr-1**	**Yr-2**	**Yr-3**	**Yr-4**	**Yr-5**
a	**Labour**					
1	Land Clearing & Development	4000	0	0	0	0
2	Layout and Digging of Pits	4800	800	0	0	0
3	Filling of pits	2400	400	0	0	0
4	Planting & Plant Support (staking)	2400	400	0	0	0
5	FYM & Fertilizers Application	1600	1600	1600	2400	2400
6	Plant protection	1200	1200	1600	1200	1600
7	Irrigation	2400	2400	2400	2400	2400
8	Earthing up, Weeding & other Intercultural Operations	2400	2400	2400	2400	2400
9	Harvesting, Carriage & Packaging Cost	0	0	0	1600	2400
	Subtotal- a	**21200**	**9200**	**8000**	**10000**	**11200**
b	**Material**					
1	Planting Material	9600	960	0	0	0
2	Farmyard Manure	1200	1200	2400	3600	3600
3	Vermicomposting	1200	1200	2400	3600	3600
4	Other concentrated manures (Bonemeal, fish meal etc.)	0	0	0	0	0
5	Nitrogen(N)	208	416	624	832	1040
6	Phosphorous (P)	848	1696	2544	3392	4240
7	Potassium(K)	480	960	1440	1920	2400
8	Plant protection	1000	1000	1200	1500	16000
9	Fencing	1000	0	0	0	0
10	Cost of Drip Irrigation	20000	0	0	0	0
	Subtotal-b	34336	6232	8208	11244	27280
	Total a+b	55536	15432	16208	21244	38480
c	Miscellaneous Expenses (10%)	1000	1000	1000	1000	1000
d	**Total cost**	**56536**	**16432**	**17208**	**22244**	**39480**
e	Number of years capitalization (Yrs.)	5				
f	**Total cost (rounded off)**	**151900**				

	Crop : Mango					
	Varieties : Banganapalli, Mallika, Neelam, Totapuri					
	Unit / Area (sq. m)	**4000**	**1 Acre**			
	Spacing (m)	**4 x 3**				
	No. of Plants	**333**				
	System of Planting/ Layout	**Square**				
						(₹)
Sl no	**Particulars**	**Yr-1**	**Yr-2**	**Yr-3**	**Yr-4**	**Yr-5**
a	**Labour**					
1	Land Clearing & Development	4800	0	0	0	0
2	Layout and Digging of Pits	10000	800	0	0	0
3	Filling of pits	6000	400	0	0	0
4	Planting & Plant Support (staking)	4800	400	0	0	0
5	FYM & Fertilizers Application	2400	2400	3200	3200	3200
6	Plant protection	2400	2400	2400	2400	2400
7	Irrigation	3200	3200	4000	4000	4000
8	Earthing up, Weeding & other Intercultural Operations	4000	4000	4400	4800	4800
9	Harvesting, Carriage & Packaging Cost	0	0	4000	4800	5600
	Subtotal- a	**37600**	**13600**	**18000**	**19200**	**20000**
b	**Material**					
1	Planting Material	20000	2000	0	0	0
2	Farmyard Manure	3333	5000	5000	6667	6667
3	Nitrogen(N)	433	867	1300	1733	2167
4	Phosphorous (P)	1767	3533	5300	7067	8833
5	Potassium(K)	1000	2000	3000	4000	5000
6	Irrigation(diesel/electricity/lumpsum requirements)	1200	1200	1200	1200	1200
7	Paclobutrazol cost	0	0	0	1200	1800
8	Plant protection	2000	2000	2000	2000	16000
9	Live Fencing	3000	0	0	0	0
10	Cost of Drip Irrigation	25000	0	0	0	0
	Subtotal-b	57733	16600	17800	23867	41667
	Total a+b	95333	30200	35800	43067	61667
c	Miscellaneous Expenses (10%)	4767	1510	1700	2153	3083
d	**Total cost**	**100100**	**31710**	**37500**	**45220**	**64750**
e	Number of years capitalization (Yrs.)	3				
f	**Total cost (rounded off)**	**169300**				

	Crop : Citrus					
	Varieties : Lime/Sweet Orange					
	Unit / Area (sq m)	**4000**	**1 Acre**			
	Spacing (m)	**6 x 6**				
	No. of Plants	**110**				
	System of Planting	**Square**				
						(₹)
Sl no	**Particulars**	**Yr-1**	**Yr-2**	**Yr-3**	**Yr-4**	**Yr-5**
a	**Labour**					
1	Land Clearing & Development	4800	0	0	0	0
2	Layout and Digging of Pits	4000	400	0	0	0
3	Filling of pits	1600	400	0	0	0
4	Planting & Plant Support (staking)	1600	400	0	0	0
5	FYM & Fertilizers Application	1200	1200	1600	1600	1600
6	Plant protection	1200	1600	1600	1600	1600
7	Irrigation	2400	600	800	1000	1000
8	Earthing up, Weeding, pruning & other Intercultural Operations	4000	4000	4800	4800	6000
9	Pruning and training	0	800	800	800	800
10	Harvesting, Carriage & Packaging Cost	0	0	0	2400	2400
	Subtotal-a	**20800**	**9400**	**9600**	**12200**	**13400**
b	**Material**					
1	Planting Material (including transportation)	3300	330	0	0	0
2	Farmyard Manure	1100	1100	1100	1100	1100
3	Nitrogen(N)	286	429	572	715	858
4	Phosphorous (P)	1507	933	875	1049	1166
5	Potassium(K)	330	462	594	726	858
6	Irrigation (diesel/electricity/lumpsum requirements)	800	800	1000	1200	1500
7	Plant protection	300	500	700	900	1100
8	Fencing	1000	0	0	0	0
	Subtotal-b	8623	4554	4841	5690	6582
c	**Total cost (a+b)**	**29423**	**13954**	**14441**	**17890**	**19982**
d	Number of years capitalization (Yrs.)	5				
e	**Total cost (rounded off)**	**95700**				

	Crop : Guava					
	Varieties : Allahabad Safeda, Lalith, others					
	Unit / Area (sq m)	**4000**	**1 Acre**			
	Spacing (m)	**3 x 3**				
	No. of Plants	**440**				
	System of Planting	**Square**				
						(₹)
Sl no	**Particulars**	**Yr-1**	**Yr-2**	**Yr-3**	**Yr-4**	**Yr-5**
a	**Labour**					
1	Land Clearing & Development	4000	0	0	0	0
2	Layout and Digging of Pits	12000	800	0	0	0
3	Filling of pits	8000	800	0	0	0
4	Planting & Plant Support (staking)	8000	1200	0	0	0
5	FYM & Fertilizers Application	3200	3200	4000	4000	4000
6	Plant protection	1600	1600	2400	2400	4000
7	Irrigation	1600	1600	1600		
8	Earthing up, Weeding, pruning & other Intercultural Operations	1200	1200	2000	2000	2400
9	Pruning and training	800	4000	4000	4000	4800
10	Harvesting, Carriage & Packaging Cost	0	0	2400	3200	4000
	Subtotal-a	**40400**	**14400**	**16400**	**15600**	**19200**
b	**Material**					
1	Planting Material (including transportation)	17600	1760	0	0	0
2	Farmyard Manure	2200	2200	2200	2200	2200
3	Nitrogen (N)	602	1205	1807	2409	3012
4	Phosphorous (P)	4805	1866	2798	2798	3731
5	Potassium (K)	1144	2288	3432	4576	5720
6	Irrigation (diesel/electricity/ lumpsum requirements)	800	1000	1200	1500	1500
7	Plant protection	440	300	400	400	600
8	Fencing	1000	0	0	0	0
9	Others if any (Specify)	23000	0	0	0	0
	Subtotal-b	51591	10618	11837	13884	16763
	Total a+b	91991	25018	28237	29484	35963
c	Miscellaneous expenses (10%)	9199	2502	2824	2948	3596
d	**Total cost**	**101190**	**27520**	**31061**	**32432**	**39559**
e	Number of years capitalization (Yrs.)	3				
f	**Total cost (rounded off)**	**159800**				

	Crop : Pomegranate					
	Varieties : Ganesh, Mridula, Bhagua, Jalore seedless					
	Unit / Area (sq m)	**4000**	**1 Acre**			
	Spacing (m)	**5 x 3**				
	No. of Plants	**270**				
	System of Planting	**Square**				
						(₹)
Sl no	**Particulars**	**Yr-1**	**Yr-2**	**Yr-3**	**Yr-4**	**Yr-5**
a	**Labour**					
1	Land Clearing & Development	4000	0	0	0	0
2	Layout and Digging of Pits	12000	800	0	0	0
3	Filling of pits	4000	800	0	0	0
4	Planting & Plant Support (staking)	2400	400	0	0	0
5	FYM & Fertilizers Application	1600	1600	1600	2400	2400
6	Plant protection	1600	2000	2800	3200	3200
7	Irrigation	800	800	1200	3200	3200
8	Earthing up, Weeding, pruning & other Intercultural Operations	2400	2400	3200	4000	4800
9	Harvesting, Carriage & Packaging Cost	0	0	1600	2400	3200
	Subtotal-a	**28800**	**8800**	**10400**	**15200**	**16800**
b	**Material**					
1	Planting Material (including transportation) - Seedling/Rootstock	17550	1755	0	0	0
2	Farmyard Manure	2700	2700	2700	5400	8100
3	Nitrogen(N)	702	2106	2106	2106	2106
4	Phosphorous (P)	1431	3578	3578	3578	3578
5	Potassium(K)	2025	2025	2025	2025	2025
6	Irrigation (diesel/electricity/lumpsum requirements)	1000	1500	2000	2000	2000
7	Plant protection	900	1500	2100	2400	2400
8	Fencing	1000	0	0	0	0
9	Others if any (Specify) Drip Irrigation	30000	0	0	0	0
	Subtotal-b	57308	15164	14509	17509	20209
c	**Total cost (a+b)**	**86108**	**23964**	**24909**	**32709**	**37009**
d	Number of years capitalization (Yrs.)	3				
e	**Total cost (rounded off)**	**135000**				

	Crop : Tissue Culture Banana					
	Varieties : Grand Naine					
	Unit / Area (sq m)	**4000**	**1 Acre**			
	Spacing (m)	**1.65 x 1.65**				
	No. of Plants	**1470**				
	System of Planting	**Square**				
						(₹)
Sl no	**Particulars**	**Yr-1**	**Yr-2**	**Yr-3**	**Yr-4**	**Yr-5**
a	**Labour**					
1	Land Clearing & Development	2800	0	0	0	0
2	Layout and Digging of Pits	10000	400	400	0	0
3	Filling of pits	4000	200	200	0	0
4	Planting & Plant Support (staking)	4800	200	200	0	0
5	FYM & Fertilizers Application	2000	2000	2000	1200	1200
6	Plant protection	1500	1500	1500	1600	1600
7	Irrigation	4800	4800	4800	800	800
8	Earthing up, Weeding, pruning & other Intercultural Operations	3200	3200	3200	3200	3200
9	Harvesting, Carriage & Packaging Cost	3500	3500	3500	1200	2000
	Subtotal-a	**36600**	**15800**	**15800**	**8000**	**8800**
b	**Material**					
1	Planting Material (including transportation) - Seedling/Rootstock	20580	2058	2058	0	0
2	Farmyard Manure	1764	1764	1764	1764	1764
3	Other concentrated manures (Bonemeal, fish meal etc)	3440	3440	3440	3440	3440
4	Nitrogen(N)	3440	3440	3440	3440	3440
5	Phosphorous (P)	7791	7791	7791	7791	7791
6	Potassium(K)	9555	9555	9555	9555	9555
7	Plant protection	300	300	300	400	600
8	Wooden poles (@ 2 poles per plant) - Rs. 10 /- per pole	29400	0	0	0	0
9	Labour for fixing poles including rope, etc.	2500	0	0	0	0
	Subtotal-b	75330	24908	24908	22950	23150
	Total a+b	111930	40708	40708	30950	31950
c	Miscellaneous expenses	700				
d	**Total cost (a+b)**	**112630**	**40708**	**40708**	**30950**	**31950**
e	Number of years capitalization (Yrs.)	1				
f	**Total cost (rounded off)**	**112600**				

	Crop : Aonla					
	Varieties : NA7, Amrit (NA6), Kanchan, BSR-1 (Pharmaceutical use), Others					
	Unit / Area (sq m)	**4000**	**1 Acre**			
	Spacing (m)	**6 x 6**				
	No. of Plants	**110**				
	System of Planting/ Layout	**Square**				
						(₹)
Sl no	**Particulars**	**Yr-1**	**Yr-2**	**Yr-3**	**Yr-4**	**Yr-5**
a	**Labour**					
1	Land Clearing & Development	1600	0	0	0	0
2	Layout and Digging of Pits	1600	400	0	0	0
3	Filling of pits	1600	400	0	0	0
4	Planting & Plant Support (staking)	800	400	0	0	0
5	FYM & Fertilizers Application	1600	1600	2400	2400	2400
6	Plant protection	800	800	800	800	800
7	Irrigation	800	800	800	800	800
8	Earthing up, Weeding & other Intercultural Operations	3200	2400	3200	3200	4000
9	Training and pruning	2	4	0	0	0
10	Harvesting, Carriage & Packaging Cost	0	0	1600	2400	3200
	Subtotal-a	**12002**	**6804**	**8800**	**9600**	**11200**
b	**Material**					
1	Planting Material (including transportation) - Seedling/Rootstock	2750	275	0	0	0
2	Farmyard Manure	550	550	550	550	550
3	Nitrogen(N)	151	226	452	602	602
4	Phosphorous (P)	1157	292	583	700	700
5	Potassium(K)	286	286	429	429	429
6	Irrigation (diesel/electricity/lumpsum requirements)	800	800	800	0	0
7	Plant protection	300	300	400	400	600
8	Fencing	1000	0	0	0	0
	Subtotal-b	6994	2728	3214	2681	2881
c	**Total cost (a+b)**	**18996**	**9532**	**12014**	**12281**	**14081**
d	Number of years capitalization (Yrs.)	4				
e	**Total cost (rounded off)**	**52800**				

	Crop: Custard Apple					
	Varieties: NMK -1					
	Unit / Area (sq m)	**4000**	**1 Acre**			
	Spacing (m)	**5 x 2.5**				
	No. of Plants	**320**				
	System of Planting/ Layout	**Square**				
						(₹)
Sl no	**Particulars**	**Yr-1**	**Yr-2**	**Yr-3**	**Yr-4**	**Yr-5**
a	**Labour**					
1	Land Clearing & Development	4800	0	0	0	0
2	Layout and Digging of Pits	12800	800	0	0	0
3	Filling of pits	5200	800	0	0	0
4	Planting & Plant Support (staking)	2400	800	0	0	0
5	FYM & fertilizers Application	1600	1600	2400	2400	3200
6	Plant protection	800	800	1200	1200	2000
7	Irrigation	2400	2400	2400		
8	Earthing up, Weeding, pruning & other Intercultural Operations	3200	3200	4000	4000	4800
9	Pruning and training	2400	2400	2400	2400	2400
10	Harvesting, Carriage & Packaging Cost	0	0	2000	3200	4000
	Subtotal	**35600**	**12800**	**14400**	**13200**	**16400**
b	**Material**					
1	Planting Material	19200	1920	0	0	0
2	Farmyard Manure	3200	3200	3200	3200	3200
3	Nitrogen(N)	1095	1314	1533	1752	1971
4	Phosphorous (P)	2120	2544	4240	6784	7632
5	Potassium(K)	1040	1248	2080	3328	3744
6	Irrigation (diesel/electricity/lumpsum requirements)	800	1000	1200	1500	1500
7	Plant protection	300	600	900	1200	1500
8	Fencing	1000	0	0	0	0
9	Drip Irrigation system	24000	0	0	0	0
	Subtotal	52755	11826	13153	17764	19547
c	**Total cost (a+b)**	**88355**	**24626**	**27553**	**30964**	**35947**
d	Number of years capitalization (Yrs.)	3				
e	**Total cost (rounded off)**	**140500**				

	Crop : Drumstick					
	Varieties : PKM- 1					
	Unit / Area (sq m)	**4000**	**1 Acre**			
	Spacing (m)	**1.8 x 1.8**				
	No. of Plants	**1235**				
	System of Planting/ Layout	**Square**				
						(₹)
Sl no	**Particulars**	**Yr-1**	**Yr-2**	**Yr-3**	**Yr-4**	**Yr-5**
a	**Labour**					
1	Land Clearing & Development	3000	0	0	0	0
2	Layout and Digging of Pits	6000	400	400	0	0
3	Filling of pits	3000	200	200	0	0
4	Planting & Plant Support (staking)	3000	200	200	0	0
5	FYM & fertilizers Application	1500	1500	1500	900	900
6	Plant protection	1500	1500	1500	1200	1200
7	Irrigation	600	600	600	800	800
8	Earthing up, Weeding, pruning & other Intercultural Operations	3000	3000	3000	2400	2400
9	Harvesting, Carriage & Packaging Cost	3500	3500	3500	900	1500
	Subtotal-a	**25100**	**10900**	**10900**	**6200**	**6800**
b	**Material**					
1	Planting Material (including transportation) - Seedling/Rootstock	5340	534	534	0	0
2	Farmyard Manure	2225	2225	2225	2225	2225
3	Vermicomposting	1780	1780	1780	3560	3560
4	Other concentrated manures (Bonemeal, fish meal etc)					
5	Nitrogen(N)	609	609	609	609	609
6	Phosphorous (P)	673	673	673	673	673
7	Potassium(K)	1765	1765	1765	1765	1765
8	Irrigation (diesel/electricity/lumpsum requirements)	1000	1000	2000	2000	2000
9	Plant protection	21200	300	300	400	600
	Subtotal-b	52755	11826	13153	17764	19547
c	**Total cost (a+b)**	**59692**	**19786**	**20786**	**17432**	**18232**
d	Number of years capitalization (Yrs.)	1				
e	**Total cost (rounded off)**	**60000**				

	Crop : Oil palm				
	Varieties: Tenera Hybrid				
	Unit / Area (sq m)	**4000**	**1 Acre**		
	Spacing (m)	**9 x 9 x 9**			
	No. of Plants	**97**			
	System of Planting/ Layout	**Triangular**			
					(₹)
Sl no	**Particulars**	**Yr-1**	**Yr-2**	**Yr-3**	**Yr-4**
a	**Material**				
1	Land preparation and levelling	5000	0	0	0
2	Internal road formation for transportation	0	0	0	0
3	Planting Material (incl. 10% extra during 2nd year) (@ 193/- per plant for imported seedling	11600	1160	0	0
4	Farmyard Manure	4275	6477	6477	6477
5	Fertilizers		1500	1500	900
a	Nitrogen(N)	298	595	895	894
b	Phosphorous (P)	321	641	962	962
c	Potassium(K)	228	456	684	855
d	Micronutrients – Magnesium ($MgSO_4$)	80	143	285	285
e	Micronutrients – Boran (Borax)	64	128	257	257
6	Plant Protection Chemicals	500	500	700	700
7	Herbicide Cost	500	500	500	500
8	Drip Irrigation	25914	0	0	0
	Subtotal-a	**48780**	**10600**	**10760**	**10930**
b	Operation and Labour	15000	9000	9000	12000
	Pruning, Harvesting charges etc.	0	0	0	3000
	Subtotal-b	**15000**	**9000**	**9000**	**15000**
	Total a+b				
c	Miscellaneous expenses	2930	1000	1000	1000
d	**Total cost**	**66710**	**20600**	**20760**	**26930**
e	Number of years capitalization (Yrs.)	4			
f	**Total cost (rounded off)**	**135000**			

	Crop : Dragon fruit			
	Varieties: PKM- 1			
	Unit / Area (sq m)	**4000**	**1 Acre**	
	Spacing (m)	**2.5 x 2.5**		
	No. of Plants	**1600**		
	System of Planting/ Layout	**Square**		

(₹)

Sl no	**Particulars**	**Yr-1**	**Yr-2**
a	**Material**		
1	Planting Material (including transportation) – Seedling/Rootstock	256000	0
2	Farmyard Manure	8000	0
3	Vermicomposting	0	0
4	Nitrogen(N)	1313	1641
5	Phosphorous (P)	11089	6161
6	Potassium(K)	3433	2452
7	Irrigation (diesel/electricity/LS provision)	25000	2000
8	Plant protection	3000	5000
9	Erection of stones/CC pillars of 10' height at 2.5 x 2.5 spacing @ ₹ 350 per pillar	224000	0
10	Planting & Plant Support (staking)/steel framing & erection	64000	0
	Subtotal-a	**595835**	**17254**
b	Labour		
	Subtotal-b	**625875**	**35654**
c	**Total a+b**		
d	Number of years capitalization (Yrs.)		2
e	**Total cost (rounded off)**		**661500**

Yield and income parameters:

Yield & Price - Assumption	**Yr-1**	**Yr-2**	**Yr-3**	**Yr-4**
Yield per tree (Kg)	0	0.9	1.25	1.8
Yield per unit (Kg/Acre)	0	2304	3200	4608
Sale Price (₹/Kg)	100			
Income (₹ per acre)	0	230400	320000	460800

Note:

- The crop is commercially cultivated in countries like Vietnam, Thailand, Israel, Malaysia and Sri Lanka.
- It is an exotic fruit introduced for cultivation in India. The crop is cultivated to a very limited extent of about 3000 ha in the country mostly in the States of Karnataka, Maharashtra, Gujarat, Andhra Pradesh, Telangana and Tamil Nadu.
- A few farmers in AP have taken up dragon fruit cultivation in Sangareddy and Medak districts.
- Department of Horticulture submitted the proposal for fixation of unit cost considering agro-climatic suitability and potential market. The techno-economic parameters were provided by Horticulture University.

Key technical aspects include:

- It's a cactus group plant that adopts to tropical climate
- Propagation by cuttings / seed
- Climbing plants that requires framework of poles for physical support (cement concrete or stone post)
- 400 to 420 supporting poles required / acre
- Planting 2.5 m X 2.5 m and 4 plants per pole
- Bearing from 2nd year, but commercial production from fourth year
- Repayment**:** 6 years including three years grace period

Polyhouse/Shadenet

Sl no	Name of the Scheme	Slab (sq. mt)	Unit Cost/ sq. mt in ₹	Amount (₹ lakh)
1	Construction of Flat Roof Net House with Cable purlin	2025	538	10.89
		3965	488	19.35
2	Ultra Low-cost shade net-240 sq.m (Gherkins)	240	312.50	0.99
3	Ultra Low-cost shade net-400 sq.m	400	253.75	1.28

Note:

- Polyhouse /Shade net house are to be constructed as per the extant guidelines issued by Department of Horticulture.
- Small Net Houses of less than 2025 sq. mm are viable when it is taken on cluster basis by farmers collectives (FPOs) duly supported by promotional agency. The promotional agency should have knowledge in both production and marketing aspects as also should have on farm post- harvest infrastructure for grading of the produce and marketing.
- Repayment for all categories of farmers ranges from 4-7 years, depending on cash flow.
- Repayment may be fixed at half-yearly interval with a moratorium period of 9 months.
- Expenditure of first crop cycle may be capitalized with the unit cost. Margin Money from the borrower would be 10-15% of project cost.
- Borrowers should practice good agricultural practices for getting better yield and quality of the produce.
- In case of Polyhouse/Net Houses, the financing entity may ascertain availability of subsidy from the Department of Horticulture.

Pandal Based Vegetable Cultivation

Cost for Establishment of Permanent Pandal (1 Acre)

Sl no	Particulars	Unit	Quantity	Rate (₹)	Amount (₹)
1	Stone/Cement Pillars (10 ft height)	No	185	550	101750
2	Stone/Cement Pillars (6 ft height)	No	12	400	4800

3	Hiders	No	120	200	24000
4	GI Wire				
a)	8 Gauge (70-90 GSM)	Qtls	6	9500	57000
b)	12 Gauge (70-90 GSM)	Qtls	6	9500	57000
5	Labour Charges				48350
	Total cost				**292900**

Detailed Unit Cost of Permanent Pandal (Per Acre)

Sl no	**Particulars**	**Amount (₹)**
1	Establishment of Permanent Pandal	292900
2	Land preparation and miscellaneous expenditure	2,300
3	Mulching	11,200
4	Cost of Vegetable seedlings/seeds	13,000
5	Organic Manures	12,000
6	Thaiwan Sprayer	18,500
7	Trellis	5,000
8	Fertilizers, Fungicides, Pesticides and	9,100
9	Plastic crates	10,000
	Total cost	**374000**

Special Terms of Financing:

Banks may examine the following aspects while considering the proposals for extending credit facilities -

- Feasibility of the proposed area for the crop and capability of the farmer/entrepreneur to take up such innovative activity.
- Arrangements for supply / sourcing of plant material.
- Technology support available from KVKs or Horticulture department officials for cultivation of crops.
- The Bank to consult the State Dept of Horticulture or the concerned commodity board while selecting the area to ensure technical feasibility of crop investment.
- Loans under the scheme shall be given to those beneficiaries who have assured source irrigation. Necessary term loan may be provided to create such facilities.
- The bank to satisfy itself that planting, material of required quantity and quality, procured by the beneficiaries are from reliable sources such as Agri Universities, State Govt or any recognized seed manufacturers.
- Loans shall be issued in respect of investments for raising plants during the first year and for subsequent maintenance, till the plant attains economic bearing stage, or as indicated in the unit cost. However, where loans are proposed to be availed of only for the first year planting, it should be ensured that the beneficiaries have their own resources to meet subsequent expenditure.
- Beneficiaries may be advised to use tissue culture plantlets.
- The pits dug will be standard size specified for crop selected; the pits dug will be filled with top soil and well decomposed farm yard manure and soil disinfectants if necessary; planting of approved high yielding varieties to suit the situation should be insisted upon; the young plants should be staked immediately after planting and shade/ cover/ hutting etc., provided wherever necessary and irrigated; suitable inter crops may be taken up during the gestation period of the main crop wherever feasible; the recommended fertilizer and plant protection schedule shall be followed strictly. The components like fertilizers, chemicals, weedicides etc., shall be disbursed only in kind or based on actual.

Sector 5
Forestry

Forests play a crucial role in supporting the livelihoods of rural communities, contributing to the state economy, mitigating the threat of global warming, and conserving fertile soil and vulnerable wildlife. Their function as carbon sinks further underscores their importance as a critical environmental asset.

Telangana state has recorded a forest area of 27.68 lakh ha during 2022-23, accounting for 24.69 percent of the total geographical area of the state.

Agroforestry, combining trees with crops and/or animal production, addresses environmental, economic, and social issues. It provides long-term economic stability and resilience against climate change. Agroforestry systems can be classified based on structure (components and their arrangement) and function (productive and protective).

The income generated from the forestry sector in Telangana State for the year 2022-23 is ₹30.06 crore.

Sl No	Type of Plantation	Spacing (m)	Population (per ha)	Amount (₹)	Repay-ment (Yrs.)	Gestation (Yrs.)
1	Melia dubia	3 x 3	1111	130000	7	6
2	Bamboo	5 x 5	400	120000	8	5
3	Teak	2 x 2	2500	140000	13	7
4	Jamun	8 x 8	156	120000	9	4
5	Eucalyptus	3 x 2	1667	125000	7	6
6	Casuarina	1.50 x 1.50	4444	100000	4	3
7	Subabul	2 x 2	2500	90000	4	3
8	Sandalwood (with Casuarina)	3.50 x 1.75	650 (per acre)	40000	12/4*	11/3*

**For Casuarina and Sandalwood respectively*.

Sector 6
Sericulture & Honeybee rearing

Sericulture in Telangana is a unique Agro industry that blends agricultural practices with industrial processes. The state is known for producing two types of silk viz. Mulberry and Tussar.

Mulberry cultivation and silkworm rearing are agricultural in nature, while activities such as silk reeling, twisting, and weaving are industrial. In the backdrop of this, NABARD has revised unit cost of sericulture for FY 2025-26.

Potential districts	Siddipet, Medak, Hanumakonda, Waranga, Jangaon, Mahabubabd, Mulugu, JS Bhupalapally, Karimnagar, Jagityal, Rajanna Sircilla, Peddapalli, Khammam, Bhadradri Kothagudem, Suryapet, Nalgonda, Bhuvanagiri, Mahabubnagar, Gadwal, Narayanpet, Wanaparthi

Shoot Rearing system- Cocoon formation stage			
Sl no	**Item/Activity**	**Unit Size**	**Amount (₹)**
1	Mulberry garden establishment	2 acres	143020
2	Rearing equipment	300 DFLs/batch	75000
3	Rearing house (RCC) - 50' x 20' x 15'	1000 sq. ft	1000000
4	Rearing cost for first batch (3 cycles)	300 DFLs	20000
5	**Total cost (rounded off)**		**1238000**
Note	a) Repayment: 4 years with 6 months moratorium b) Labour cost per man day is considered from ₹240 to ₹400		
Chawki Rearing Centre			
Sl no	**Item/Activity**	**Unit Size**	**Amount (₹)**
1	Mulberry garden establishment	2 acres	143020
2	Rearing equipment	5000 DFLs/batch	700000
3	Rearing house (RCC) - 50' x 20' x 15'	1000 sq. ft	1000000
4	Rearing cost for first batch (3 cycles)	5000 DFLs	195000
5	**Total cost (rounded off)**		**2138000**
Note	a) Repayment: 3 years with 6 months moratorium b) State Government Subsidy is not considered for working out viability		

Reeling and Twisting unit		
Sl no	**Activity**	**Amount (₹)**
1	Automatic Reeling Unit 200 Ends (ARM) Indigenous	9483000
2	Automatic Reeling Unit 400 Ends (ARM) Indigenous	16982000
3	Twisting unit (480 spindles)	1500000
Note	a) Machinery with Applicable GST b) Repayment: 7 years with maximum of 6 months moratorium	
Honeybee rearing		
Sl no	**Activity**	**Amount (₹)**
1	10 box model	
	Total cost (rounded off)	**63500**
Note	Repayment: 6 years with one year grace period	

Special Terms of financing:

- The beneficiaries may be identified in consultation with the State Dept of Sericulture/ Central Silk Board especially in non-traditional zones/ districts.
- While financing for seed cocoon production, ensure that the scheme area is a notified seed area.
- Ensure that the beneficiaries selected have adequate source of irrigation while financing for mulberry cultivation under irrigated conditions.
- Improved high yielding varies of mulberry and silk work races like CB (cross bred BV selections), bivoltine, may be insisted upon under irrigated conditions.
- Supply of planting material of specified mulberry variety may be ensured through Govt Seed Farm or reputed private sources.
- Adequate supply of quality disease free silk work eggs may be ensured.
- The equipment financed under the scheme for rearing of silkworm should comply with the specifications of state department of sericulture and match with the rearing programme contemplated by the beneficiary.

- The acreage norms specified (half acre in seed area and one acre in commercial area) should be strictly adhered to while financing for development of infrastructure like rearing house.
- The rearing house should be constructed as per the design and specifications of department of sericulture.
- Area specifications (300' x 15' for one area model) may be adopted while constructing the rearing house and the same should be an exclusive rearing house and not a rearing cum dwelling house.

Sector 7
Animal Husbandry

Animal Husbandry, a significant sub sector in Agriculture, plays a pivotal role in the rural economy, providing gainful employment to many small and marginal farmers enhancing their economic status. Besides providing supplemental income, dependability (even during drought times) is one aspect that makes the livestock activity more lucrative and progressive.

Telangana is renowned for its abundant livestock. The state has a population of sheep 190.63 lakh, poultry 799.99 lakh, buffalo 42.26 lakh, goat 49.35 lakh, cattle 42.31 lakh and pig 1.78 lakh. For the fiscal year 2022-23, the per capita availability of eggs was 392, and the per capita availability of meat was 23.97 kg.

Crop and animal husbandry complement each other and have an equal role in enhancing farmer income. About 29 lakh families in Telangana State are engaged in the livestock sector for their livelihood, and the livestock sector is emerging as one of the most potential and income-generating sectors for rural and semi-urban areas. Between 2012 and 2019, the livestock population in the state increased from 26.7 million to 32.6 million, with a 22.09% growth rate between these years.

The livestock sector has become a powerful tool for socio-economic change and a vital priority component in rural development and poverty alleviation programmes in the State. There is more potential to extend finance under this sector especially through formation of more FPOs for Dairy and Sheep. In the backdrop of this, NABARD has revised unit cost of activities under Animal Husbandry for FY 2025-26.

Sl no	Particulars	Unit	Amount (₹)		Repayment
1	**Dairy**				
i	**Cross Bred Cows (CBC)**	1+1	Cost of 2 CBCs (₹88000/animal)	176000	5 Years (monthly / quarterly instalments)
			Transport cost (₹2800/animal)	5600	
			Equipment	4500	
			Feed Cost for 1 month (1 animal)	4000	
			Insurance (@4.50%)	7920	
			Veterinary Aid (₹3250/-)/animal	6500	
			Total cost (rounded off)	**204500**	
ii	**Graded Murrah Buffaloes (GMB)**	1+1	Cost of 2 GMBs (Rs. 98000/animal)	196000	5-6 Years (monthly /quarterly instalment)
			Transport cost (₹3500/animal)	7000	
			Equipment	4600	
			Feed Cost for 1 month (1 animal)	3250	
			Insurance (@4.50%)	8820	
			Veterinary Aid (₹3250/-)	6500	
			Total cost (rounded off)	**226200**	
iii	**Mini Dairy (CB cow)**	3+2	Shed (5 animals, 40 sq.ft/animal ₹190/sq.ft: Thatch roof)	38000	5-6 Years (monthly / quarterly instalment)
			Shed (3 calves, 30 sq.ft/animal ₹190/sq.ft: Thatch roof)	17100	
			Transportation cost (₹3000/animal)	15000	
			Cost of equipment (₹2500/animal)	12500	
			Cost of animals (₹90000/animal)	450000	
			Feed for 1 month for 1 batch	18000	
			Fodder cultivation (0.50 acre)	12000	
			Insurance (@4.50%)	20250	
			Veterinary aid (₹3500 per animal) for 1 batch	10800	
			Total cost (rounded off)	**593700**	
iv	**Mini Dairy (GMB)**	3+2	Shed (5 animals, 40 sq.ft/animal ₹190/sq.ft: Thatch roof)	38000	5-6 Years (monthly / quarterly instalment)
			Shed (3 calves, 30 sq.ft/animal ₹190/sq.ft: Thatch roof)	17100	
			Transportation cost (₹3250/animal)	16250	
			Cost of equipment (₹2275/animal)	11375	
			Cost of animals (₹98000/animal)	490000	

Sl no	Particulars	Unit	Amount (₹)		Repayment
			Feed for 1 month for I batch (₹4100/-x 3)	12250	
			Fodder cultivation (0.50 acre)	12000	
			Insurance (@4.50%)	22050	
			Veterinary aid (₹3275/animal) for 1 batch	9825	
			Total cost (rounded off)	**628900**	
v	**Mini Dairy (CB cow)**	5+5	Shed (10 animals, 40 sq.ft/animal ₹190/sq.ft: AC sheet roofing)	76000	5-6 Years (monthly / quarterly instalment)
			Shed (5 calves, 30 sq.ft/animal ₹190/sq.ft: AC sheet roofing)	28500	
			Transportation cost (₹2800/animal)	28000	
			Cost of equipment (₹2275/animal)	22750	
			Cost of animals (₹88000/animal)	880000	
			Feed for 1 month for 1 batch (₹4000/- x 5)	20000	
			Fodder cultivation (0.50 acre)	12000	
			Insurance (@4.50%)	39600	
			Veterinary aid (₹3275/animal) for 1 batch	16375	
			Total cost (rounded off)	**1123300**	
			Note: Additional cost for water source, chaff cutter, milking machine etc., can be considered subject to viability.		
vi	**Mini Dairy (GMB cow)**	5+5	Shed (10 animals, 40 sq.ft/animal ₹190/sq.ft: AC sheet roofing)	76000	5-6 Years (monthly / quarterly instalment)
			Shed (5 calves, 30 sq.ft/animal ₹190/sq.ft: AC sheet roofing)	28500	
			Transportation cost (₹3275/animal)	32750	
			Cost of equipment (₹2275/animal)	22750	
			Cost of animals (₹98000/animal)	980000	
			Feed for 1 month for 1 batch	20500	
			Fodder cultivation (0.50 acre)	12000	
			Insurance (@4.50%)	44100	
			Veterinary aid (₹3275/animal) for 1 batch	16375	
			Total cost (rounded off)	**1233000**	

Sl no	Particulars	Unit	Amount (₹)		Repayment
			Note: Additional cost for water source, chaff cutter, milking machine etc., can be considered subject to viability.		
vii	**Commercial Dairy**	Any Size	Depending upon the size of the unit. Indicative costs for various items of investments are - a) Cost of CBC - ₹7500-8000/Lpd; cost of GMB - ₹9000-11000/Lpd; Cost of equipment - ₹1100/animal b) Higher transport can be considered on need basis. c) Shed space - 20 sq.ft/calf; 30 sq.ft/heifer; 40 sq.ft/ adult; Shed cost - ₹120/sq.ft-Thatched Roof; ₹150/sq.ft-Asbestos roof d) Fodder cultivation - 1 ac/10 animals; ₹24000/acre e) Feed cost to be capitalised for the first batch of animals @ ₹4000/animal; Insurance cost - actual (4.50% of animal cost assumed); Veterinary aid - ₹1500/animal. Other investments like feed store, milk shed, chaff cutter, minor irrigation structures for fodder unit, water supply system, milking machines, fencing, cost of bulls / AI unit, feed mixing unit etc., may be considered based on need and subject to viability.		
viii	**Female Calf Rearing (CB Calf)**	1 no.	Cost of Feed for 23 months (1620 kg) for CB claves	43000	5 years including 2 years grace period
			Veterinary Aid	1500	
			Insurance	2500	
			Total cost (rounded off)	**47000**	
ix	**Female Calf Rearing (GMB Calf)**	1 no.	Cost of Feed for 40 months (1900 kg) for Buffalo claves	49000	5 years including 2 years grace period
			Veterinary Aid	1500	
			Insurance	2500	
			Total cost (rounded off)	**53000**	
x	**Fodder Cultivation**	1 acre	Cost of land preparation - Ploughing	2500	5 years
			Forming ridges	1000	
			Planting Material and seeds	3300	
			Farmyard Manure 5 tonnes	2500	
			Fertilizer	2800	

Sl no	Particulars	Unit	Amount (₹)		Repayment
			Cost of application of FYM and Fertilizer	1200	
			Cost of Planting (12 man days /acre: ₹100/ day)	1500	
			Cost of weeding	3000	
			Cost of irrigation	2000	
			Cost of Cutting	2800	
			Miscellaneous	1200	
			Total cost (rounded off)	**23800**	
			* Improved varieties of Hybrid Napier (CO-3, 4, 5: APBN-1 and 2), maize, etc. may be encouraged.		
2	**Sheep Rearing**				
i	**Breeding unit - Nellore breed**	20+1	Cost of Ram	12000	6 years including 1 year grace period
			Cost of Ewes (₹7500/animal)	150000	
			Cost of feeding for one cycle	12000	
			Cost of Insurance (7.50% of 3 years)	12150	
			Cost of Veterinary Aid	2750	
			Total cost (rounded off)	**188900**	
ii	**Breeding unit - Nellore breed**	10+1	Cost of Ram	12000	6 years including 1 year grace period
			Cost of Ewes (₹7500/animal)	75000	
			Cost of feeding for one cycle	6000	
			Cost of Insurance (7.50% of 3 years)	6525	
			Cost of Veterinary Aid	1300	
			Total cost (rounded off)	**100800**	
iii	**Breeding unit - Deccani breed**	20+1	Cost of Ram	12000	6 years including 1 year grace period
			Cost of Ewes (₹7200/animal)	144000	
			Cost of feeding for one cycle	6000	
			Cost of Insurance (7.50% of 3 years)	11700	
			Cost of Veterinary Aid	2500	
			Total cost (rounded off)	**176200**	
iv	**Ram Lamb Fattening**	20/ batch	Cost of Lambs (20 Nos)	76000	6 years including 1 year grace period
			Cost of Feeding	11000	
			Cost of Veterinary Aid	4000	
			Total cost (rounded off)	**91000**	

3	**Goat Rearing**				
i	**Rearing Unit - Osmanbadi breed/ Improved desi**	20+1	Cost of Buck	12000	6 years including 1 year grace period
			Cost of Doe	144000	
			Cost of feeding for one cycle	9500	
			Cost of Insurance (7.50% of 3 yrs.)	11700	
			Cost of Veterinary Aid	3300	
			Equipment	3000	
			Total cost (rounded off)	**183500**	
ii	**Rearing Unit - Osmanbadi breed/ Improved desi**	10+1	Cost of Buck	12000	6 years including 1 year grace period
			Cost of Doe	72000	
			Cost of feeding for one cycle	5500	
			Cost of Insurance (7.50% of 3 yrs.)	6300	
			Cost of Veterinary Aid	2000	
			Equipment	3000	
			Total cost (rounded off)	**100800**	
4	**Piggery**				
i	**Breeding unit**	3+1	Cost of Boar	7500	
			Cost of Sows (₹4500 Each)	13500	
			Cost of shed (70 Sq.ft /boar ; 20 Sq.ft /sow and farrowing pen 100 Sq.ft)	24500	
			Cost of Fattener shed (10 Sq.ft/ fattener)	12000	
			Cost of Feeding adults and growers	48000	
			cost of Insurance (6%)	1260	
			Cost of Veterinary Aid	9000	
			Tricycle for Kitchen waste collection, water supply and equipment	32500	
			Total	148260	
			Total cost (rounded off)	**148200**	
ii	**Breeding unit**	10+1	Cost of Boar	7500	5 years including 1 year grace period
			Cost of Sows (₹4500 Each)	45000	
			Cost of shed (70 Sq.ft /boar; 20 Sq.ft /sow and farrowing pen 100 Sq.ft)	60000	
			Cost of Fattener shed (10 Sq.ft/ fattener)	46200	
			Cost of Feeding adults and growers	9000	
			cost of Insurance (6%)	3150	
			Cost of Veterinary Aid	67000	

			Tricycle for Kitchen waste collection, water supply and equipment	190000	
			Labor charges	82000	
			Total	509850	
			Total cost (rounded off)	**509900**	
iii	**Fattener unit**	10	Cost of piglets	30000	5 years including 1 year grace period
			Cost of shed (12.50 Sq.ft/piglet	12500	
			Cost of feed	6000	
			Miscellaneous	1500	
			Total cost (rounded off)	**50000**	
5	**Poultry**				
i	**Contract Broiler farming**	Any Size	Only cost of shed and equipment need to be considered. Indicative cost would be: Thatched roof shed ₹ 110 /sq.ft / shed with asbestos roof and local material – ₹ 190-210/sq. and Equipment (₹ 22/broiler)		6-8 years
ii	**Independent broiler units**	Large units	Cost of Shed Construction - Asbestos – ₹ 190-210/sq. ft;, thatched roof - ₹ 90/sq. ft, Equipment - ₹ 22/broiler; Cost of DOC - ₹ 40-45 Cost of Feed - ₹ 38-40/kg Cost of Misc. Expenses - ₹ 18/bird (₹ 420-450/bird) Feed Consumption – 3 to 4 kg based on age of marketing		05 Years
iii	**Layer farming**	Any Size	Preferably over 50000 birds **Depends upon the size -** Cost of Shed Construction - Raised Platform with asbestos sheet - ₹270-300/sq.ft; Cost of Equipment - (dep. upon quotation) – Cage system - ₹ 70/brooder & grower; ₹ 90/layer Cost of DOC – ₹ 40-42. Cost of Feed - ₹ 32-35 (brooder)/ ₹ 30-32(grower mash)/₹ 28-30 (layer mash) per kg; Cost of Misc expenses - ₹ 20 upto point of lay; ₹ 20 during lay (₹ 650-680/bird) **Feed Consumption** 1 – 8 Week 2 kg 9- 20 Weeks 6 kg After 21 Weeks 700 grams/week		8 years with one year grace period

iv	**Back Yard Birds Unit**	50 Birds	Cost of Shed Construction - Asbestos – ₹ 220/sq.ft @ 2 sq ft per bird;, Equipment - ₹ 24/bird; Cost of DOC - ₹ 30 Cost of Feed - ₹ 32/kg @ 7 kgs for 20 weeks Cost of medicines, vaccines Misc. Expenses - ₹28/bird **Total: ₹ 36600** *Regular supply of DOC needs to be ensured by proper tie up arrangement.		
6	**Plough Bullocks and Bullock Carts**				
i	**Plough Bullocks**	1 pair	A. Non-Descript (medium size): **₹ 55000** B. Hallikar Bullocks: **₹ 85000** (including insurance)		5 years
ii	**Bullock Carts**	1 no.	A. Pneumatic Tyre carts (3 T): **₹ 58000** B. Carts of local make / wooden: **₹ 48000**		5 years
	*Demand is mainly in sugarcane areas for transport of cane to mills.				
7	**Swachh Meat Hub**				
i	**Portable hygienic slaughter unit with composting of solid and liquid waste for small ruminants**	01	Swachh Meat Hub portable slaughter unit	750000	3 years including 6 months grace period
			Knife sterilizer	5000	
			Knife sharpener	5000	
			Weighing balance	5000	
			Sealer	3000	
			Fly Catcher (2)	10000	
			Fabrication table	30000	
			Set of knives	2000	
			Dress & Gumboot	5000	
			Computerized billing machine	35000	
			Display and price board	20000	
			Biofertilizer processing unit (waste management unit)	100000	
			Total cost (rounded off)	**970000**	

Special Terms of financing:

Dairy -

- Good quality animals (Jersey Crossbreds in Plains & HF Crossbreds in Hilly/cool areas or Graded Murrah Buffaloes), preferably freshly calved animals in 2 or 3 lactations, yielding on an average 10-11 litres of milk (Cows)/8 -9 litres (Buffaloes), per day are financed.
- There is an interval of 6 months between purchase of two animals / batches, so as to ensure continuity in milk production.
- Linkages in respect of training, breeding & vet care, feed, fodder, medicines and marketing are adequate.
- Local veterinarians advise is availed of regarding age, health and quality of the animals to be purchased.
- Animals are identified immediately after purchase through ear tagging and are insured, preferably under a long-term master policy.
- Farmer cultivate green fodder (especially mini/commercial dairies, at least 3-4 months ahead of purchase of animals) to reduce the expenditure. Green fodder cultivation in minimum 0.5 – 1.0 acre has to be ensured for mini dairy farms.
- Farmers follow the schedules regarding deworming and vaccination against prevalent diseases (HS, BQ, FMD etc.,) with the help of local vet.
- Suitable arrangements exist for sale of milk either, through organised sector (BMCUs or Pvt dairies) or direct sales, at remunerative prices. If sale of milk is through organised route, arrangements could be explored for recoveries through proper tie-up.
- Banks may finance hand operated Milking Machines for Mini dairy units.
- For Female Calf Rearing, banks may ensure that Cross bred calves of Jersey & HF and Murrah /Graded Murrah Buffalo calves are supported. Calves of 3-4 months age are advised as they are at the right age for exploiting their true genetic potential. Around 1620 kg of feed is required for the calf from the age of 3-4 months till it calves for the first time (28-30 months) for CB calves and 1900 kgs feed is required till calving (from 5 to 45 months) for buffalo calves. The activity can be integrated with milch animal financing.

Sheep Rearing

- Good quality animals (Nellore breed, Deccani etc. depending upon the area), aged around 10 to 14 months may be financed.
- Linkages in respect of training, breeding & vety care, feed, grazing area, medicines and marketing are adequate.
- Local veterinarian's advice is availed of regarding age, health and quality of the animals to be purchased.
- Animals are identified immediately after purchase through ear tagging and are insured, preferably under a long term master policy.
- Beneficiary follows the schedules regarding deworming and vaccination against prevalent diseases (Sheep Pox, ET etc.,) with the help of local vet.
- The bank may provide Aadhar number to Animal Husbandry department to ascertain coverage render state government scheme before financing to Yadava golla, Kurma communities.
- Cost of thatched shed may be considered on need basis

Goat Rearing

- Good quality animals (Osmanbadi)/ improved desi, aged around 10 to 14 months may be financed
- Linkages in respect of training, breeding & vety care, feed, grazing area, medicines and marketing are adequate
- Local veterinarians advise is availed of regarding age, health and quality of the animals to be purchased
- Animals are identified immediately after purchase through ear tagging and are insured, preferably under a long term master policy
- Beneficiary follows the schedules regarding deworming and vaccination against prevalent diseases (Goat Pox etc.,) with the help of local vet.
- In case of stall fed goat rearing units (50+2 size), the shed space requirement will be about 1000 sq ft (10 sq ft / doe, 20 sq.ft for buck and 4 sq.ft/kid) with fodder cultivation in 1.25 acre (irrigated)/ 2 acres (seasonal).

Piggery

- Units are to be encouraged in locations with sources of vegetable /hotel /other waste to economise feed expenses
- Good quality foundation stock aged around 8 months in case of breeding units and 2 months in case of fattening units may be financed.
- The prices as per quotation may be considered for pigs purchased from State Government farms.
- Linkages in respect of training, breeding, veterinary care, feed, garbage collection and marketing are adequate.
- Animals are identified immediately after purchase through ear tagging and are properly insured.
- Borrower follows the schedules regarding deworming and vaccination with the help local veterinarian and experts of Animal Husbandry Department.

Poultry

- For Contract Broiler farming - There is a proper tie-up arrangement with the integrators like VHPL, Suguna, etc., and at least 5 batches of birds /year are supplied by the integrators. Proper training is given to the farmers before taking up the activity and the activity is taken up in a compact area.
- For Independent broiler units - Extreme care is taken in financing independent broiler units as more broiler production is coming under contract farming. Linkages in respect of training, chicks, feed, medicines etc., are adequate. Cost of chicken can be considered based on the quotation of hatchery. The farm has a captive clientele/adequate market since integrators are dominating the finished broiler market.
- For Layer farming - Beneficiary follows the schedules regarding deworming and vaccination against prevalent diseases. Automation could be considered depending on the proposal subject to technical feasibility and financial viability. For all large-scale units, the techno economic appraisal has to be undertaken on each individual project basis.

Swachh Meat Hub

- The Swachh Meat Hub – A portable hygienic slaughter unit with composting of solid and liquid waste for small ruminants has been developed by ICAR- National Meat Research Institute with support of NABARD under Farm Sector Promotion Fund.
- The 10'(L) x 6'(W) x 10'(H) unit has a capacity of handling 20 sheep/ goat per day and is expected to operate 25 days in a month and 300 days in a year.
- Recurring expenditure for the unit comprises of cost of animals (live weight based), consultancy charges of veterinary doctor, salary of plant operator, 2 Butchers, electricity charges, packing material, consumables, repair & Maintenance and Miscellaneous expenditure.
- Considering the perishability of the end products and high rate of income generation from the unit, the working capital cycle for the unit may be considered as one day or one week.
- Bankers may consider extending a separate CC limit for financing the recurring cost.

Sector 8
Fisheries

Fisheries are one of the fast-growing sectors that generate income and employment in Telangana. Telangana's fisheries sector ranks 9th in inland fish production and is among the fastest-growing sectors in the state, supported by 6.14 lakh ha of water resources, including reservoirs, tanks, and ponds.

The sector plays a vital role in the overall socioeconomic development of fisher families in Telangana by providing nutrition and food security. The state government encourages the formation of Fish Farmer Producer Organizations (FFPOs) to increase fishermen's incomes through value added products. In the year 2018-19, Government of India extended the facility of the Kisan Credit Card (KCC) to the fish farmers and fishers to help them to meet their working capital requirements.

A new activity Murrel Hatchery has been introduced this year in view of its feasibility and viability as an attractive investment project activity. In the backdrop of this, NABARD has revised unit cost of activities under fisheries for FY 2025-26. Potential district for Murrel cluster in Telangana are Mancherial, Peddapalli, Karimnagar.

Sl	Activity	Capital Cost (₹)	Recurring Activity	Recurring Cost (₹)	Total cost (₹)
1	**Fish Seed Rearing unit 1 ha.**				
	Ground cleaning, deweeding, Levelling etc.,	25000	Cost of Fish seed	60000	
	Earthwork excavation, Construction of pond with bunds, consolidation -1 ha WSA	350000	Fertilizers	4500	
	Inlet, outlet and sluice structure	40000	Micro-nutrients	500	
	Pump house - 100 sqft	50000	Lime	2000	
	Pumps - 2 nos -5 HP	100000	Cost of feed	45000	
	Aerators @₹35000/-, 1 Nos	35000	Wages / Salaries		
	Nets and accessories	30000	Technician	7000	
			Skilled Labour	7000	
	Water testing kit 20000	20000	Unskilled Labour	6000	
			Harvesting and packing expenses	6000	
	Electrification L.S.	50000	Medicine	2000	
	Watchman shed - 100 sqft	50000	Power Charges	10000	
	Total cost (rounded off)	**750000**		**150000**	**900000**
2	**Marketing support to Fishers**				
			Purchase of fish local @ 30 Kgs per day	21000	
			Purchase of ice	3150	
			Transportation and other incidental charges	850	
	Total cost (rounded off)	NIL		**25000**	**25000**

Sl	Activity	Capital Cost (₹)	Recurring Activity	Recurring Cost (₹)	Total cost (₹)
3	**Re-Circulatory Aquaculture System units -10 tons capacity**				
	Land required (acres)	1800000	Seed cost @₹4/pc for 24000 (incl GIFT Tilapia)	96000	
	Quarantine Tank		Feed	400000	
	Nursery tank		Electricity charges	1,0000	
	Growing tanks		Manpower	48000	
	Water supply system and Water filtration system for all tanks		Miscellaneous	6000	
	Effluent plant				
	Equipment for transfer from one tank to other, harvest, crates, etc.				
	Generator set				
	Total cost (rounded off)	**1800000**		**700000**	**2500000**
4	**Ice plant with capacity of (10) tonnes**				
	Complete 10 TPD tube ice plant	1900000	Electricity	300000	
			Wages for 3 @₹ 600/day	200000	
			Maintenance	100000	
	Total cost (rounded off)	**1900000**		**600000**	**2500000**
5	**Feed Mill Small (1-5 Quintals/day)**				
	Warehouse	146657	Working capital for feed ingredient	400000	
	Machinery Hall	107000			
	Office/ laboratory	87295	Electricity	10000	
	Generator room	57548			
	Flour Grinder	450000	Packing charges per ton	15000	
	Electrical Items	20000			
	Water supply system	15000	Wages and salaries	75000	
	Miscellaneous	16500			
	Total cost (rounded off)	**900000**		**500000**	**1400000**

Sl	Activity	Capital Cost (₹)	Recurring Activity	Recurring Cost (₹)	Total cost (₹)
6	**Pen culture one ha**				
	Pen material with erection charges	200000	Seed (60000 fry @₹ 100/-/1000 fry for fingerlings rearing)	6000	
			Feed	25000	
			Wages	13000	
			Harvesting and packing expenses	6000	
	Total cost (rounded off)	**200000**		**50000**	**250000**
7	**Cage culture**				
	One Unit (6 x 4 x 4 Sq. m.)	150000	Seed (5000 x ₹4/-)	20000	
			Feed	140000	
			Wages	20000	
	Total cost (rounded off)	**150000**		**180000**	**330000**
8	**Establishment of Fish seed Hatchery One Unit of 2 Ha**				
	Earth Work	435616	Cost of Brood Fish	100000	
	Brooder ponds				
	Nursery ponds				
	Rearing ponds	468545	Hormones and other spawning agent	25000	
	Civil Structures	258839	Fertilizers	20000	
	Spawing pools	996000			
	Incubation chambers		Micronutrient	25000	
	Spawn collection cistern				
	Egg collection tank		Lime	10000	
	Shed for store				
	Laboratory room				
	Overhead tank		Cost of feed	75000	
	Inlet and outlets and water supply				
	Machinery and Equipment				

Sl	Activity	Capital Cost (₹)	Recurring Activity	Recurring Cost (₹)	Total cost (₹)
	Water Pump				
	Sprinklers with pipe				
	Oxygen cylinders with all fittings		Wages/ Salaries	30000	
	Nets		Harvesting and packing expenses	10000	
	Breeding kit				
	(syringe needle, homogenizes, aerator etc)		Miscellaneous (Power charges)	5000	
	Refrigerator, aerator, oxygenator etc.	41000			
	Total cost (rounded off)	**2200000**		**300000**	**2500000**
9	**Medium scale ornamental Fish rearing and Aquarium units One unit**				
	Cement Tanks (50000 l)	200000	Purchase of brooder fish 1000 no's both male and female	30000	
	Shed	150000	Feed 500 kg/year @ ₹220/kg for entire cycle	110000	
	Live feed facility and feed maker	30000	Electricity and fuel per month	15000	
	Glass tanks	30000	Wages to labours	35000	
	Water supply system	25000	Misc. expenditure	10000	
	Electrification L.S.	30000			
	Water treatment equipment	45000			
	Aeration/lifesaving system	15000			
	Total cost (rounded off)	**525000**		**200000**	**725000**
10	**Semi Intensive fish culture 1 ha.**				
	Ground cleaning, deweeding, Levelling etc.,	25000	Pond Preparation, lime, zeolites, etc	30000	
	Earthwork excavation, Construction of bund	300000			

Sl	Activity	Capital Cost (₹)	Recurring Activity	Recurring Cost (₹)	Total cost (₹)
	Inlet, outlet and sluice structure	40000			
	Pump house - 100 sqft	50000	Fish (IMC/GIFT) Seed-7000 nos ₹3/each (size: 80-100 mm)	21000	
	Pumps - 1 nos -5 HP	50000	Feed(9.5 Tons @₹30/Kg)	285000	
	Aerators @35,000/ , 1 Nos	35000	Cow dung (10 Tons/ha @ ₹2000/ Ton)	20000	
	Nets and accessories	30000	fertiliser (200 kg @₹10/kg)	2000	
	Water testing kit 20000	20000	Harvesting	20000	
	Electrification L.S.	50000	Electricity	40000	
	Watchman shed - 100 s.ft	50000	Miscellaneous	20000	
	Total cost (rounded off)	**650000**		**438000**	**1088000**
11	**Biofloc Unit with 7 Tanks**				
	Setup of Tarpaulin/Fibre tanks (15,000 Ltr capacity)	175000	Feed cost (FCR 1:1.5, ₹30/kg *4.2 Tons)	126000	
	Shed material, accessories fixing charges- 200 m2	120000			
	Water supply borewell (3 HP)	100000			
	PVC pipe fittings for air, water flow	75000	Seed cost (₹7000*2.5)	17500	
	Nets and accessories	15000			
	One Blower (1 HP), Air stones and other accessories	30000			
	Electrification	10000			
	Power generator (2 KVA)	45000	Probiotics, Test kits	24500	
	Weighing balance	10000			
	Miscellaneous expenses	20000			
	Total cost (rounded off)	**600000**		**168000**	**768000**

Sl	Activity	Capital Cost (₹)	Recurring Activity	Recurring Cost (₹)	Total cost (₹)
12	**Circulatory Aquaculture System (CAS) - 1 tank+ 1 pond**				
	Tank	265795	Fish Seed (1000*15)	15000	
	PVC 1500 GSM tanks for Fish Cultivation @ 100 kg (weight of tank)		Feed (45*2.7 MT)	126000	
	Welding and UPVC pipes for fitting- including transport		Maintenance	5000	
	Blowers (1 quantity) including of transport		Transport	5000	
	Aeration tubes for Oxygenation purpose				
	PVC pipes and fitting for blowers and tanks inlets and outlets				
	Civil work and Shed (15*18 sq. Feet)				
	Pond	15000			
	Cost for earthen pond 25' x 25' x 6 '				
	Fencing for biosecurity	10000			
	Total cost (rounded off)	**290800**		**151000**	**441800**
13	**Shrimp farming per ha (SPF L. vannamei)**				
	Pond Construction	700000	Pond preparation including liming	40000	
	Civil work- In let / Outlet Sluices	80000	Salt, minerals and probiotics (35 T of salt to maintain 3 ppt salinity)	350000	
	Water Pumps 7.5 HP (1 No)	40000	Repairing and renovation of electrical and water supply	20000	
	Generator (1 No)	50000	Land lease value for 4 months	80000	

Sl	Activity	Capital Cost (₹)	Recurring Activity	Recurring Cost (₹)	Total cost (₹)
	Aerators 2 HP (6 Nos)	180000	Seed (6,00,000 no stocking per ha @ ₹ 0.35 per seed) including transportation	210000	
			Feed (1.3 FCR and ₹ 95/kg)	1235000	
	Pump house/Farm shed (1 No)	100000	Fuel & Electricity (₹ 8 per unit for 20000+ units)	160000	
	Pump house/Farm shed (1 No)	100000	Watch & ward	80000	
			Lab/Technician charges	50000	
	Pipes, wiring etc	40000	Harvest charges	30000	
			Miscellaneous	25000	
	Total cost (rounded off)	**1190000**		**2280000**	**3470000**
14	**Murrel Hatchery**				
	Land development and fencing	100000	Broodstock maintenance	100000	
	Brooder and nursery tanks (10 units)	400000	Feed cost	100000	
	Water supply system & pipelines	100000	Electricity and water	60000	
	Overhead tank + sump construction	100000	Hormones and spawning aids	40000	
	Aeration system (blowers, diffusers)	120000	Labour (1 full-time + 1 part-time)	200000	
	Generator (5 KVA)	60000	Fuel for generator	30000	
	Oxygen cylinders and fittings	50000	Chemicals & disinfection	20000	

Sl	Activity	Capital Cost (₹)	Recurring Activity	Recurring Cost (₹)	Total cost (₹)
	Refrigerator and Incubation chamber	50000	Packaging and transport	40000	
	Laboratory equipment	70000	Maintenance and repairs	30000	
	Shed/office + electrification	100000			
	Miscellaneous and contingency	30000			
	Total cost (rounded off)	**1180000**		**155000**	**1335000**

Special Terms of financing:

- Borrowers may be selected in clusters so that the scheme can be effectively monitored.
- Only quality fish seed should be procured and stocked in the pond.
- Varieties of fish, stocking density, manuring and artificial feeding, as prescribed by the Department of Fisheries, must be adhered to.
- The pond should be kept free from predators and aquatic weeds.
- Inlets and outlets should be covered by screens to prevent entry of unwanted fishes and escape of fish from the pond.
- Periodical sample netting should be conducted to assess the growth and health of fishes.
- Permission / clearance from the concerned authority for construction of ponds, water lifting etc. must be obtained.

Sector 9
Farm Mechanization

Farm mechanization refers to the development and use of machines that can supplement the efforts of human and animal power in agricultural processes. Alternatively, Farm Mechanization is also the application of engineering principles and technology in agricultural production storage and processing on the farm. It saves inputs like seeds and fertilizers by 15–20%, labour requirement and operational time by 20–30%, increases cropping intensity by 5–20% and crop productivity by 10–15%.

In Telangana, 41% of the farmers spend on repair and maintenance of agri implements while 83.7% hire some sort of equipment for crop production. Only 4.4% of farm households own a tractor, while 3.8% own any one of the power driven tilling equipment/crop harvesters/power driven threshers/ laser land levelers and only 2.3% own a tractor and one of the above four equipment *(source: NCAER – Jan 2023)*.

Post-harvest losses (PHL) in respect of several agricultural commodities are high, indicating lower levels of farm mechanization and poor infrastructure for storage and transportation.

NABARD is providing Long Term Refinance to the eligible financial institutions against Ground Level Credit (GLC) disbursements under Farm Mechanization Sector by them. NABARD has included unit cost for Solar dryer for FY 2025-26 which is having good potential at the ground level and it would be more viable when taken up with FPOs.

Sl no	Name of the Activity	Unit cost (₹ lakh)	Repayment (Yrs.)
1	Tractors with matching equipment and trolley (30-51 hp)	10.00	5
2	Second-hand Tractor	4.50	3
3	Mini tractor with matching equipment (15-24 hp)	6.50	3
4	Power tiller with matching equipment (12 hp)	2.30	3
5	Combined Harvester	26.70	7
6	Combined Harvester - Paddy - 75 hp	31.00	7
7	Paddy Transplanter (walking type)	3.00	3
8	Diesel based self-propelled Paddy Transplanter	4.20	3
9	Paddy Straw Baler (round)	3.50	3
10	Paddy Straw Baler (square)	5.00	3
11	Turmeric cooking Machine (2/4 drum)	6.10	5
12	Laser guided land leveller	4.25	3
13	Rotary Mulcher (tractor operated)	2.20	3
14	PTO operated post hole digger	1.30	3
15	Mini power weeder (2hp)	0.30	3
16	Medium (4.8 hp) power weeder	0.70	5
17	Brush cutter	0.36	3

Sl no	Name of the Activity	Unit cost (₹ lakh)	Repayment (Yrs.)
18	Rotary weeder (self-propelled-2hp)	0.90	3
19	Sugarcane Transplanter	2.25	3
20	Sugarcane Harvester - 175 hp	120.00	7
21	Agri Tractor Backhoe Loader (55-65 hp)	8.75	5
22	Automatic Seeding Machine	3.39	3
23	Paddy Cleaner	2.75	3
24	22 hp - 4WD	4.80	5
25	24 hp- 4WD	5.30	5
26	36 hp - 4WD	7.80-8.30	5
27	40 hp - (2WD and 4 WD)	6.50-8.25	5
28	42 hp - (2WD and 4 WD)	6.50	5
29	44 hp - (2WD and 4 WD)	7.50-8.25	5
30	46/47 hp -(2WD and 4 WD)	7.80-9.50	5
31	50 hp -(2WD and 4 WD)	9.80	5
32	55 hp - (2WD and 4 WD)	11.50	5
33	75 hp - 4WD	15.00	5
34	Electrical tractor - 26 hp	6.70	5
35	Cotton Harvester	59.00	9
36	Winnower – multi-crop - semi automatic - 500 kg/hr, 3 hp	3.00	3
37	Ride on Self Propelled multipurpose Agricultural tool bar with Lithium-ion Battery operated with accessories/attachments such as (3 tyne sweep shovel cultivator, rear tub, 2 feet flail mover)	3.40	-
Tractor Drawn Implements			
38	MB plough (2 bottom)	0.85	3
39	2 Bottom disc plough with Tubular frame (Heavy duty)	0.80	3
40	Disc harrow - 6/8/12	1.50	3
41	Deep Tillage Equipment (like Chisel/Sub soil plough)	0.60	3
42	9 Tyne rigid cultivator (Heavy duty)	0.48	3
43	11 Tyne rigid cultivator (Light duty)	0.58	3
44	11 Tyne rigid cultivator (Heavy duty)	0.61	3
45	9 Tyne Spring loaded cultivator (Light duty)	0.48	3

Sl no	Name of the Activity	Unit cost (₹ lakh)	Repayment (Yrs.)
46	9 Tyne Spring loaded cultivator (Heavy duty)	0.53	3
47	Tractor Mounted Pneumatic Planter (Multi-crop Planter)	2.20	3
48	Tractor drawn manual seed cum Fertiliser drill with spring Tyne cultivator and leveller- 6 Tyne (ATP type)	0.38	3
49	Tractor drawn manual seed cum Fertiliser drill with spring Tyne cultivator and leveller- 8 Tyne (ATP type)	0.42	3
50	Tractor drawn manual seed cum fertilizer drill with rigid Tyne cultivator and leveller – 6 Tyne (ATP type)	0.44	3
51	Tractor drawn manual seed cum fertilizer drill with rigid Tyne cultivator and leveller – 8 Tyne (ATP type)	0.66	3
52	Automatic seed cum fertilizer drill with spring Tyne cultivator and leveller 6 Tyne (ATP type)	0.77	3
53	Automatic seed cum fertilizer drill with spring Tyne cultivator and leveller 8 Tyne (ATP type)	0.83	3
54	9-row seed cum fertilizer drill	0.70	3
55	Tractor drawn multi crop planter	1.05	3
56	Seed drill (multi crop including Paddy) - Tractor drawn	1.45	3
57	Happy Seeder	2.45	3
58	Levelling blade (7'1/2" heavy duty) 145 kg	1.20	3
59	Slim tyre & inter-culture equipment	0.70	3
60	Cotton Mobile Shredder	2.50	3
61	Hydraulic reversible plough - tractor mounted	1.20	3
62	Puddler - 8 Ft	1.80	3
63	Ridge plastering machine	2.80	3
Rotavators			
64	24 blades single speed chain drive 540 RPM Rotavator - cultivated soils	0.78	3
65	36 blades gear drive 540 RPM (HD) Rotavator - cultivated soils	1.25	3
66	42 Blades gear drive 540 RPM (HD) Rotavator - virgin soils	1.35	3
67	Mini Tractor Rotavator 16/20/24 blades	0.80	3

Sl no	Name of the Activity	Unit cost (₹ lakh)	Repayment (Yrs.)
Plant Protection Equipment			
68	Power sprayer 16 lts. Capacity	0.22	3
69	Power operated sprayer (Mist blower)	0.30	3
70	Power operated sprayer (Mist blower cum Duster)	0.90	3
71	Tractor mounted HTP Sprayer with 2 guns and frame & tank	0.75	3
72	2 Stroke 20 Lt knapsack sprayer	0.31	3
73	Tractor mounted boom sprayer	1.40	3
74	4 Stroke 25 Lt knapsack sprayer	0.35	3
75	Drone - battery powered (Drone, 2 sets of additional battery, Generator set, Insurance, Training & License)	11.10	5
76	Drone - Hybrid (Petrol operated, Battery backed - drone, charger, insurance, Training & License)	13.70	5
Post Harvest Equipment			
77	Groundnut thresher of capacity 300-500 kg/hr with 10 HP air cooled diesel engine	2.80	3
78	Groundnut decorticator- Rocking type of 200-400 kg pods per hour capacity with 2 HP electric motor	0.62	3
79	Groundnut decorticator- Rotary type of 200-400 kg pods per hour capacity with 2 HP electric motor	0.42	3
80	Groundnut Sheller (7.5 hp diesel engine operated)- 6 qtl/hr	2.85	3
81	Power Chaff cutter of 200 kg/ hour capacity with 2 HP BIS/ISI marked electric motor	0.40	3
82	Power Chaff cutter of 500 kg/ hour capacity with 5 HP BIS/ISI marked electric motor	0.93	3
83	Power Chaff cutter of 500 kg/hour capacity with 5 HP BIS/ISI marked diesel engine	1.10	3
84	Maize Sheller with 2 HP electric motor - 1000 kg per hour capacity	1.40	3
85	Maize Sheller with 5 HP electric motor - 2000 kg per hour capacity	1.42	3

Sl no	Name of the Activity	Unit cost (₹ lakh)	Repayment (Yrs.)
86	Multi crop Thresher (Wheat, Sunflower and all pulses) - 8 hp diesel engine, 1000-1500 kg/hr, mobile type, tractor drawn	1.40	3
87	Paddy Thresher (3 Walker type) -10 HP diesel engine of capacity 600-1000 kg/hr	1.50	3
88	Paddy Thresher (4 Walker type) -10 HP diesel engine of capacity 600-1000 kg/hr	1.65	3
89	Maize de-husker cum thresher of 3000 kg/hr (operated with PTO of tractor of >35 hp) with two pneumatic wheels	2.40	3
90	Maize Sheller operated with 35 hp tractor PTO - 2000 kg/hour capacity mobile type	1.10	3
91	Power Reaper - tractor mounted	2.40	3
92	Power Reaper - manual	1.20	3
93	Power Operated Groundnut Dry Pod Thresher	2.50	3
94	Multi crop thresher - 21-35 hp diesel engine, 3000 kg/hr, mobile type, tractor drawn	2.25	3
95	Multi crop thresher 30-45 hp diesel engine, 4000 kg/hr, mobile type, tractor drawn	3.50	3
96	Hydraulic Biomass Briquette Plant	20.00	5
97	Multi grain loader	1.60	3
98	Multi crop drying machine - 3.5 -4 MT/ 3 hrs	27.00	7
99	Mini Raw rice mill	7.50	5
100	Chilly dryer - 150-200 kg/hr	4.40	3
101	Chilly dryer - 150 -2MT/hr	12.00	5
Animal/Bullock Drawn Implements			
102	Animal-drawn 4 row seed cum fertilizer drill (Anantapur type)	0.40	3
103	Animal-drawn 4/5 row automatic seed cum fertilizer drill (Adilabad type)	0.28	3
Animal Husbandry Equipment			
104	Milking machines - 2 bucket	0.59	3
105	Milking machines - 4 bucket	1.35	3
106	Solar Milking machines - single bucket - 20 L	0.35	3
107	Feed mixing plants - poultry and cattle feed - 2 TPH	1.75	3

Sl no	Name of the Activity	Unit cost (₹ lakh)	Repayment (Yrs.)
108	Silage Machine - 5 hp - 4.5 MT/hr	1.57	3
Custom Hiring Centres			
1	**CHC for Cotton (without harvester)**		
a	Tractor - 50 hp	9.80	7-9
b	Rotavator - 36 blade	1.25	
c	Rotavator - 42 blade	1.35	
d	Cotton Shredder	2.50	
e	Sprayers	0.50	
	Total cost (rounded off)	**15.40**	
2	**CHC for Maize**		
a	Tractor - 40 hp	8.00	7-9
b	Rotavator - 36 blade	1.25	
c	Cultivator	0.48	
d	Maize sheller - 2 hp (2 units)	2.80	
e	Maize de-husker	2.40	
f	Maize harvester	25.00	
	Total cost (rounded off)	**39.93**	
3	**CHC for Groundnut**		
a	Tractor - 36 hp	7.80	7-9
b	Rotavator - 36 blade	1.25	
c	Cultivator - 9 tyne	0.48	
d	Groundnut decorticator	0.62	
e	Groundnut thresher 300 to 500/kg per hr	2.85	
	Total cost (rounded off)	**13.00**	
4	**CHC for Paddy harvesting**		
a	Paddy Harvester	31.00	7-9
b	Paddy thresher (2 units)	3.00	
c	Baler - Round	3.50	
d	Baler - Square	5.00	
	Total cost (rounded off)	**42.50**	
5	**CHC for Pulses/Soybean**		
a	Tractor - 44 hp	8.25	7-9
b	Rotavator - 42 blade (2 units)	2.70	
c	Cultivator - 9 tyne (2 units)	0.96	

Sl no	Name of the Activity	Unit cost (₹ lakh)	Repayment (Yrs.)
d	Seed drill - 6 tyne (2 units)	1.40	
e	Thresher (2 units)	2.80	
	Total cost (rounded off)	**16.11**	
6	**CHC for Dry land Crops Package**		
a	Tractor - 44 hp	8.25	7-9
b	Rotavator - 42 blade (2 units)	2.70	
c	Cultivator - 9 tyne (2 units)	0.96	
d	Seed drill - 6 tyne (2 units)	1.40	
e	Thresher (2 units)	2.80	
	Total cost (rounded off)	**16.11**	

Special Terms of financing:

- Cost may vary from district to district – depending on invoice/quotation from reputed suppliers for finance as per practice.
- Optimum usage of equipment for realizing full benefits.
- Subsidy, if any, needs to be considered.

Sector 10
Food and Agro Processing

Food processing industry has gained prominence in recent years. This sector serves as a vital link between the agriculture and industrial segments of the economy. Strengthening this link is crucial to reduce postharvest losses, improve value addition, fortification, ensure remunerative prices to farmers and affordable prices to consumers. Food processing (FP) sector has emerged as an important segment of the Indian economy in terms of its contribution to GDP, employment and exports. While India is a major producer of several agricultural commodities, value addition in agriculture continues to be low.

Ensuring availability of adequate credit to the food processing industries is given utmost importance by the Reserve Bank of India. Accordingly, the Reserve Bank has accorded priority sector status to food processing industry. Loans to food and agro-based processing units and cold chain have been classified under agricultural activities for priority sector lending. Apart from this, credit for developing agricultural infrastructure is also categorized under priority sector lending. Accordingly, loans provided for construction of storage facilities (warehouse, market yards, godowns and silos), including cold storage units / cold storage chains designed to store agricultural produce/products comes under the priority sector lending, as also loans to MSMEs involved in food processing. The share of credit limit and share of credit outstanding to food processing sector vis-à-vis manufacturing sector as a whole is low at 7.59% and 8.61%, respectively.

Telangana, being an agrarian state with more than 65% population is engaged in agriculture and allied sectors, there is an immense scope for food processing. The Telangana State Food Processing Society (TSFPS) has been established by the Government to act as a nodal agency for development of Food Processing Sector in the State.

In the backdrop of this, a chapter on Food and Agro Processing has been added in the unit cost booklet for the current year.

Sl no	Name of the Activity	Capacity	Unit cost (₹ lakh)	Repayment (Yrs.)
1	Rice Processing (Puffed Rice)	1 to 1.5 MT/hr	95	7 including moratorium period of 6 Quarters **Instalment:** Quarterly (both principal & Interest)
2	Chilly Processing (Chili Powder)	1 to 1.5 MT/hr	98	
3	Turmeric Processing unit (Turmeric Powder)	1 to 2 MT/hr	100	
4	Millets Processing (Minimal Processing)	0.2 to 1 MT/hr	69	
5	Oilseed Processing (Cold Pressed Oil Mill	0.15 to 0.5 MT/hr	39	
6	Dal mill	2 to 4 MT/hr	90	

Cost of plant and Machinery :

Rice Processing (Puffed Rice)					
Sl no	**Item description**	**Unit**	**Rate (₹ lakh)**	**Unit cost (₹ lakh)**	**Repayment (Yrs.)**
1	Puffed Rice Making Machine 1000 kg /hr	1	8.00	8.00	7 including moratorium period of 6 Quarters **Instalment:** Quarterly (both principal & Interest)
2	Soaking Vessel 1000 kg	4	1.50	6.00	
3	Digital Weighing Machine 100 kg	2	0.70	1.40	
4	Packaging Machinery 2000 packs/hr	1	3.50	3.50	
5	Plastic Trays & Utensils	1	1.00	1.00	
6	Miscellaneous	1	0.25	0.25	
7	Drainer/seiver-rotary drum drainer	1	1.50	1.50	
8	Cooling chamber - AHU 10,000-15,000 (m^3/h)	1	2.50	2.50	
9	Flavouring drum 1000 kg/hr	1	1.50	1.50	
10	Conveyor (optional)			0	
11	Transformer	1	2.30	2.30	

12	Water Softening Plant (1000 LPH)	1	1.20	1.20	
	Total			**29.15**	
	Total cost (including GST)			**34.40**	
Chilly Processing (Chilly Powder)					
1	Chili Cleaning Machine 100 Kg/hr	1	1.00	1.00	7 including moratorium period of 6 Quarters **Instalment:** Quarterly (both principal & Interest)
2	Chili De-seeding Machine 100 Kg/hr	1	2.50	2.50	
3	Chili Drying Machine -tray dryer 1 ton/hr	1	3.00	3.00	
4	Chili Grinding Machine 1 ton/hr	1	4.00	4.00	
5	Sifting Machine: 100 kg/hr	1	1.00	1.00	
6	Miscellaneous	1	0.25	0.25	
7	Transformer (160 KVA)	1	2.30	2.30	
8	Packing machine	1	4.00	4.00	
9	Weighing balance 100 kg	1	0.60	0.60	
10	Working table (10*10 feet)	1	0.60	0.60	
11	Crates	1	1.00	1.00	
	Total			**20.25**	
	Total cost (including GST)			**23.90**	
Turmeric Processing unit (Turmeric Powder)					
1	Weighing scale 2 HP	1	0.50	0.50	7 including moratorium period of 6 Quarters **Instalment:** Quarterly (both principal & Interest)
2	Washer 2 HP	1	3.50	3.50	
3	Curing boiler with furnace 2 HP	1	3.00	3.00	
4	Dryer 5 HP	1	6.00	6.00	
5	Polisher 5 HP	1	1.00	1.00	
6	Pulveriser/ Grinder 10 HP	1	4.00	4.00	
7	Siever 5 HP	1	1.50	1.50	
8	Packing machine 2 HP	1	2.50	2.50	
9	Transformer (160 KVA)	1	2.30	2.30	
10	Water Softening Plant (1000 LPH)	1	1.20	1.20	
11	Plastic Crates and Pallets	100	0.004	0.40	

	Total			**25.90**	
	Total cost (including GST)			**30.56**	
Millets Processing (Minimal Processing)					
1	Cleaning cum De-stoner cum Grader -100 kg/hr	1	1.00	1.00	7 including moratorium period of 6 Quarters **Instalment:** Quarterly (both principal & Interest)
2	De-huller 100kg/hr	1	1.00	1.00	
3	Grader cum Aspirator/Gravity Separator 0.5 t/hr	1	2.00	2.00	
4	Magnetic Separator 12000 gauze with hopper	1	0.50	0.50	
5	Packaging Machine 10-20 packs/min	1	2.00	2.00	
6	Weighing Balance 100 kg	1	0.25	0.25	
7	Polisher for millets	1	2.00	2.00	
8	Tray Dryer 60 trays	1	3.00	3.00	
9	Color Sorter	1	5.00	5.00	
10	Miscellaneous	1	0.25	0.25	
11	Transformer (160 KVA)	1	2.30	2.30	
12	Working table (10*10 feet)	1	0.60	0.60	
13	Crates	55	0.009	0.50	
	Total			**20.40**	
	Total cost (including GST)			**24.07**	
Oilseed Processing (Cold Pressed Oil Mill)					
1	Destonner-150kg/hr	1	2.00	2.00	7 including moratorium period of 6 Quarters **Instalment:** Quarterly (both principal & Interest)
2	Conveyor-150kg/hr -10 feet	1	2.00	2.00	
3	Cold Pressed machine-Hydraulic presser 150 kg/hr	1	5.00	5.00	
4	filter press 50-60 kg/hr	1	1.20	1.20	
5	Plastic Trays & Utensils	1	0.50	0.50	
6	Miscellaneous	1	0.25	0.25	

7	bottle filler -35 lt/hr -Inline Bottle Filler	1	1.50	1.50	
8	Capping sealing - plastic bottles	1	1.00	1.00	
9	Labelling - 100 containers per minute	1	1.50	1.50	
10	Weighing balance 100 kg	1	0.60	0.60	
11	Working table (10*10 feet)	1	0.60	0.60	
	Total			**16.15**	
	Total cost (including GST)			**19.06**	
Dal mill					
1	Precleaner	1	0.50	0.50	7 including moratorium period of 6 Quarters **Instalment:** Quarterly (both principal & Interest)
2	Vibrio destoner	1	1.00	1.00	
3	Gravity separator	1	3.00	3.00	
4	Dal grader	1	2.50	2.50	
5	Emery roll machine	1	1.00	1.00	
6	Chakki with emery stone	1	1.00	1.00	
7	Bucket Elevators	1	1.50	1.50	
8	Tray drier	1	0.85	0.85	
9	Dal polisher	1	1.50	1.50	
10	Colour sorter	1	6.50	6.50	
11	Fork Lift	1	1.50	1.50	
12	Weighing machine at platform	1	0.80	0.80	
13	Form fill and seal machine Including all electric motors, machine accessories, electric control panel, iron and steel platforms	1	2.75	2.75	
	Total			**24.40**	
	Total cost (including GST)			**28.79**	

Special Terms of financing:

- Cost varies with capacity of the processing unit and no of operational hours in a day and operational days in year.
- Costs will vary with project location, quotations and any additional components in the project based on sophistication of plant and machinery.
- During appraisal banks may look into various Project Components in the TFO viz; land, civil works, plant & Machinery, preliminary preoperative expenses, interest during construction, electrification cost and margin money for working capital.
- Bankers may consider land cost per their norms.
- Building: Rental basis: 70 to 100 Sqm per month during tenure of loan
- Cost towards plant and machinery varies with quotation from suppliers.
- Civil cost: It will vary as per location, layout, BOQ submitted by contractor etc.
- Rate of interest may vary as per the financing bank's loan policy
- Operational days vary from 180 to 300 depending upon availability of raw material and market demand
- **Repayment Schedule:**
    - Principal repayment installment amount may be considered based on cash flow of the project.
    - Moratorium period considered is 6 quarters. It may vary as per project cash flow and bank's loan policy.
    - Quarterly repayment is considered. It may be monthly (EMI based) depending upon the financing bank's loan policy.
- DSCR calculation may vary depending upon moratorium period and other assumptions considered in repayment schedule viz; Installment amount, rate of interest etc.
- Break even calculation may vary depending upon fixed and variable cost of the project. These expenses may vary with project location and other techno-economic assumptions.
- Input output ratio of product may vary depending upon on the product process and quality of raw material. Further output quantity may change depending on ingredients and level of concentration.

Sector 11
Renewable Energy

The energy needs of rural areas are still being met out of fossil fuels or forest wood and also dung cakes being made from cattle dung. As the fossil fuels are non-renewable sources of energy and are fast depleting and cutting the trees for fuel wood is creating ecological imbalance, there is a need to promote viable and renewable sources of energy.

India is the World's 3rd largest energy consuming Country as per International Energy Agency (IEA) and holds 3rd place in the renewable energy Country attractive index, 2024 ranked by Ernst & Young. Additionally, according to Renewables 2022 Global status report, India is ranked 4th globally in installed renewable energy capacity.

Telangana has a vast solar potential estimated at 20.41 GW and a wind energy potential of 54.7 GW. The state has a potential of 1795.7 MW for bio energy. The potential for large hydro power is 1302 MW and for small hydro power is 102.25 MW. To address the issue of major crop loss on account of wild animal incursion solar fencing could be possible solution. In the backdrop of this, unit cost for solar fencing and solar powered cold rooms (5MT) is added for FY 2025-26.

Sl no	Name of the Activity		Unit Cost (₹ lakh)	Repayment (Yrs.)
1	Solar Irrigation Pump set – Surface, Type – 3 HP		1.82	5
2	Solar Irrigation Pump set – Surface, Type – 5 HP		2.95	5
3	Solar Irrigation Pump set – Surface, Type – 7.5 HP		4.44	5
4	Solar Irrigation Pump set – Surface, Type – 10 HP		4.85	5
5	Solar Irrigation Pump set – Submersible, Type – 3 HP		2.02	5
6	Solar Irrigation Pump set – Submersible, Type – 5 HP		2.93	5
7	Solar Irrigation Pump set – Submersible, Type – 7.5 HP		4.47	5
8	Solar Irrigation Pump set – Submersible, Type – 10 HP		4.88	5
11	Grid Connected Solar Roof top (₹/KWp)			3-5
	1 KWp		0.79	
	1-2 KWp		0.78	
	2-3 KWp		0.75	
	3-10 KWp		0.65	
	10-100 KWp		0.49	
	100-500 KWp		0.46	
12	Solar Plant in farmers' land, 1 MW		300.00	12-15
13	Solar powered cold room 5 MT		13.00	7-9
14	Solar Fencing (protection from Monkey)			
	1 acre	255 meters	0.44	3-5
	5 acres	569 meters	0.57	
	10 acres	805 meters	0.68	
15	Solar Fencing (protection from Wild Boar)			
	1 acre	255 meters	0.35	3-5
	5 acres	569 meters	0.42	
	10 acres	805 meters	0.48	

Special Terms of Financing:

- Grid Connected Solar Roof top unit cost is derived as per costing presented in The World Bank – SBI Grid Connected Rooftop Solar Program (Source: Rooftop solar portal by MNRE).
- Solar Plant in farmers' land cost is as per prevailing market rate indicated by vendors and unit cost indicated by TGREDCO for projects under PM KUSUM Component A.

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Abbreviations

bcm	Billion cubic metre
ha	Hectare (10000 m^3)
m	Metre
HP	Horsepower
mm	millimetre
TPA	Tonne per annum
l	litre
lpd/h/a	Litre per day/hour/annum
Rpm	Rotations per minute
Sq.ft	Square feet
Sq.m	Square metre
m^3	Cubic metre
ton	Metric tonne (1000 kg)
lps	Litre per second
q	quintal
DFL	Disease Free Layings
Kg	Kilogram
Bgl	Below ground level
Dia	Diametre
kg/cm^2	kilogram-force per square centimeter
MT	Metric tonne
GSM	Grams per square meter

Notes:

Notes:

Disclaimer

NABARD does not accept any financial liability to anyone using this report for any purpose. The costs and parameters indicated are based on information available with NABARD and recommendations/suggestions from Govt. Departments, Bankers and Research Institutes. All Unit Costs are only indicative in nature and there may be variations based on field/local conditions. Banks/government agencies may assess the credit requirement, considering the field level situations and keeping in view the technical feasibility, financial viability and the bankability of the investments.

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