



# नाबार्ड



**कृषि और संबन्धित क्षेत्र निवेशों की इकाई लागत - 2026-27**

**Unit Costs on Investment in  
Agriculture and Allied Activities - 2026-27**

**राज्य - तेलंगाणा  
State - Telangana**

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

|                          |                                                                                                                                                          |
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# विज्ञान

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, उन्नत ऋण प्रवाह तथा निवेश समर्थन के माध्यम से कृषि एवं संबद्ध क्षेत्रों में सतत विकास को प्रोत्साहित करने के लिए प्रतिबद्ध है। उन्नत प्रौद्योगिकियों को अपनाने, मूल्य संवर्धन, जलवायु-सहिष्णु प्रथाओं तथा आजीविका विविधीकरण हेतु समयबद्ध एवं पर्याप्त निवेश ऋण की उपलब्धता सुनिश्चित करना नाबार्ड का एक प्रमुख फोकस क्षेत्र रहा है।

वैज्ञानिक ऋण योजना को सुदृढ़ करने तथा निवेश ऋण की पर्याप्त उपलब्धता सुनिश्चित करने के लिए, नाबार्ड प्रतिवर्ष राज्य स्तरीय इकाई लागत समिति (एसएलयूसीसी) का आयोजन करता है, जिसमें विभिन्न कृषि एवं संबद्ध गतिविधियों के लिए यथार्थपरक इकाई लागतों की समीक्षा की जाती है और उन्हें अंतिम रूप दिया जाता है। वित्तीय वर्ष 2026-27 के लिए तेलंगाणा राज्य की इकाई लागतों को दिनांक 19 मई 2026 को आयोजित विचार-विमर्श के आधार पर अंतिम रूप दिया गया है, जिसमें राज्य सरकार के विभागों, बैंकों, अनुसंधान एवं प्रशिक्षण संस्थानों, उद्योग विशेषज्ञों, एफपीओ, स्टार्टअप्स तथा अन्य हितधारकों के प्रतिनिधियों ने भाग लिया।

वर्तमान संस्करण में विभिन्न क्षेत्रों में इकाई लागतों में संशोधन किए गए हैं, ताकि प्रचलित बाजार परिस्थितियों, तकनीकी प्रगति तथा क्षेत्र-स्तरीय आवश्यकताओं को प्रतिबिंबित किया जा सके। इसके अतिरिक्त, कृषि एवं संबद्ध क्षेत्रों में उभरते अवसरों को ध्यान में रखते हुए अनेक नई एवं उभरती गतिविधियों को भी शामिल किया गया है। इनमें अंजीर (Fig) एवं एवोकाडो (Avocado) जैसी उच्च मूल्य वाली बागवानी फसलें, बटेर पालन (Quail Bird Farming) एवं हिफर पालन (Heifer Rearing) जैसे पशुधन आधारित उद्यम, तथा अन्य नवोन्मेषी गतिविधियाँ शामिल हैं, जिनमें कृषि आय बढ़ाने, विविधीकरण को प्रोत्साहित करने तथा सतत आजीविका के अवसर सृजित करने की क्षमता है।

इस पुस्तिका में सिंचाई, भूमि विकास, वृक्षारोपण एवं बागवानी, पशुपालन, मत्स्य पालन, वानिकी, कृषि यंत्रीकरण, नवीकरणीय ऊर्जा, खाद्य एवं कृषि-प्रसंस्करण तथा अन्य संबद्ध क्षेत्रों सहित विविध गतिविधियों के लिए इकाई लागतें समाहित हैं। अनुमोदित इकाई लागतें संकेतात्मक प्रकृति की हैं तथा वित्तपोषक संस्थानों द्वारा स्थानीय परिस्थितियों, तकनीकी व्यवहार्यता, वित्तीय व्यावहारिकता तथा परियोजना-विशेष की बैंकयोग्यता के आधार पर इन्हें उपयुक्त रूप से परिष्कृत किया जा सकता है।

मैं इस पुस्तिका की तैयारी में तेलंगाणा राज्य सरकार, एसएलबीसी, बैंकों, अनुसंधान एवं प्रशिक्षण संस्थानों, स्टार्टअप्स, एफपीओ तथा अन्य हितधारकों द्वारा प्रदान किए गए बहुमूल्य सहयोग एवं योगदान के लिए अपनी हार्दिक सराहना अभिलेखबद्ध करता हूँ। मुझे विश्वास है कि यह प्रकाशन सभी हितधारकों के लिए एक उपयोगी संदर्भ सिद्ध होगा तथा राज्य में कृषि एवं संबद्ध क्षेत्रों के लिए निवेश ऋण प्रवाह को सुदृढ़ करने में योगदान देगा।

मैं कामना करता हूँ कि सभी हितधारक इन अवसरों का प्रभावी उपयोग करते हुए तेलंगाणा में कृषि क्षेत्र में सतत विकास एवं ग्रामीण समृद्धि को सुदृढ़ बनाने में सफल हों।

**बी उदय भास्कर**

मुख्य महाप्रबंधक

तेलंगाणा क्षेत्रीय कार्यालय, हैदराबाद

## Foreword

National Bank for Agriculture and Rural Development (NABARD), as the apex development financial institution, is committed to promoting sustainable growth in agriculture and allied sectors through enhanced credit flow and investment support. Facilitating timely and adequate investment credit for adoption of improved technologies, value addition, climate-resilient practices, and livelihood diversification remains a key focus area of NABARD.

To support scientific credit planning and ensure adequate availability of investment credit, NABARD convenes the State Level Unit Cost Committee (SLUCC) annually for reviewing and finalizing realistic unit costs for various agricultural and allied activities. The Unit Costs for Telangana State for FY 2026-27 have been finalized based on deliberations held on 19 May 2026 with representatives from State Government Departments, Banks, Research and Training Institutions, Industry Experts, Farmer Producer Organizations (FPOs), Startups and other stakeholders.

The current edition incorporates revisions in unit costs across various sectors to reflect prevailing market conditions, technological advancements, and field-level requirements. In addition, several new and emerging activities have been included to address evolving opportunities in the agriculture and allied sectors. These include high-value horticultural crops such as Fig and Avocado, livestock-based enterprises such as Quail Bird Farming and Heifer Rearing, and other innovative activities with potential for enhancing farm incomes, promoting diversification, and creating sustainable livelihood opportunities.

The booklet also continues to provide unit costs for a wide range of activities covering irrigation, land development, plantation and horticulture, animal husbandry, fisheries, forestry, farm mechanization, renewable energy, food and agro-processing, and other allied sectors. The approved unit costs are indicative in nature and may be suitably refined by financing institutions based on local conditions, technical feasibility, financial viability, and bankability of individual projects.

I place on record my sincere appreciation for the valuable support and contributions extended by the Government of Telangana, SLBC, banks, research and training institutions, startups, FPOs, and other stakeholders in the preparation of this booklet. I am confident that this publication will serve as a useful reference for all stakeholders and contribute to strengthening investment credit flow for agriculture and allied sectors in the State.

I wish all stakeholders success in leveraging these opportunities fostering sustainable agricultural growth and rural prosperity in Telangana.

**B Uday Bhaskar**  
Chief General Manager  
TGRO, Hyderabad

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## Chapter 1

# Minor Irrigation

Minor Irrigation plays a critical role in enhancing agricultural productivity, improving water-use efficiency, and strengthening climate resilience in Telangana. Supported by the Godavari and Krishna river systems, the State has made significant progress in irrigation development, contributing to improved water availability for agriculture.

As per the latest groundwater assessment, nearly 79% of the assessment units (mandals) in Telangana fall under the 'Safe' category. Total Annual Groundwater recharge of the State has been assessed as 21.93 bcm and Annual extractable Ground Water resource as 19.84 bcm. The Annual Ground Water Extraction is 9.26 bcm, with the overall stage of groundwater extraction at about 46%, indicating scope for sustainable groundwater development. There is no 'Saline' category of assessment unit in the state. However, efficient management and conservation of water resources remain essential for ensuring long-term water security.

The Telangana Water, Land and Trees Act (WALTA) provides the regulatory framework for conservation of water resources, protection of water bodies, and sustainable groundwater management. The Act promotes judicious use of water and adoption of water-efficient technologies, thereby supporting sustainable irrigation practices.

Minor irrigation interventions such as bore wells, dug wells, pipelines, pump sets, and micro-irrigation systems continue to play an important role in expanding irrigation coverage and improving farm productivity. In view of the sector's importance for sustainable agricultural growth, NABARD has revised the unit costs for activities under Minor Irrigation for FY 2026-27.



**I – Dugwells****Model 1 - Dugwell in Hardrock Areas**

|                                                                                                                                                              |                           |       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------|
| <b>1. Basic Information</b>                                                                                                                                  | 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 <sup>3</sup> ) | Rate/ m <sup>3</sup> (₹) | Amount (₹) |
|-----------|-----|----------------------------|--------------------------|------------|
| 0 to 2    | 2   | 74.8                       | 315                      | 23562      |
| 2 to 4    | 2   | 74.8                       | 395                      | 29546      |
| 4 to 6    | 2   | 56.56                      | 500                      | 28280      |
| 6 to 8    | 2   | 56.56                      | 615                      | 34784      |
| 8 to 10   | 2   | 56.56                      | 740                      | 41854      |
| 10 to 12  | 2   | 56.56                      | 875                      | 49490      |

|                     |      |      |       |
|---------------------|------|------|-------|
| 3. Cost of Steining | 45.6 | 1100 | 50160 |
|---------------------|------|------|-------|

|                        |      |
|------------------------|------|
| 4. De-watering Charges | 6000 |
|------------------------|------|

|                                 |               |
|---------------------------------|---------------|
| <b>Total Cost (Rounded off)</b> | <b>263700</b> |
|---------------------------------|---------------|

|                                   |      |
|-----------------------------------|------|
| Minimum Benefitting Area in Acres | 2.23 |
|-----------------------------------|------|

|           |                                               |
|-----------|-----------------------------------------------|
| Repayment | 5-7 years including grace period of 11 months |
|-----------|-----------------------------------------------|

**Model 2 - Dugwell in Hardrock Areas**

|                                                                                                                                                                   |                          |       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------|
| <b>1. Basic Information:</b>                                                                                                                                      | 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 <sup>3</sup> ) | Rate/m <sup>3</sup> (₹) | Amount (₹) |
|-----------|-----|----------------------------|-------------------------|------------|
| 0 to 2    | 2   | 54.687                     | 315                     | 17226      |
| 2 to 4    | 2   | 54.687                     | 395                     | 21601      |
| 4 to 6    | 2   | 39.275                     | 500                     | 19638      |
| 6 to 8    | 2   | 39.275                     | 615                     | 24154      |



|                                                                                                                                                           |            |                                               |                    |                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------------------------------------------|--------------------|-------------------|
| 8 to 10                                                                                                                                                   | 2          | 39.275                                        | 740                | 29064             |
| 10 to 12                                                                                                                                                  | 2          | 39.275                                        | 875                | 34366             |
| 12 to 14                                                                                                                                                  | 2          | 39.275                                        | 1025               | 40257             |
| <b>3. Cost of Steining</b>                                                                                                                                |            | 38.528                                        | 1100               | 42382             |
| <b>4. De-watering Charges</b>                                                                                                                             |            |                                               |                    | 6500              |
| <b>Total cost (Rounded off)</b>                                                                                                                           |            |                                               |                    | <b>235200</b>     |
| Minimum Benefitting Area in Acres                                                                                                                         |            | 1.98                                          |                    |                   |
| Repayment                                                                                                                                                 |            | 5-7 years including grace period of 11 months |                    |                   |
| <b>Model 3 - Dugwell in Hardrock Areas</b>                                                                                                                |            |                                               |                    |                   |
| <b>1. Basic Information</b>                                                                                                                               |            | 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              |
| <b>2. Cost of Excavation</b>                                                                                                                              |            |                                               |                    |                   |
| <b>Depth (m)</b>                                                                                                                                          | <b>RMT</b> | <b>Quantity (m³)</b>                          | <b>Rate/m³ (₹)</b> | <b>Amount (₹)</b> |
| 0 to 2                                                                                                                                                    | 2          | 54.686                                        | 315                | 17226             |
| 2 to 4                                                                                                                                                    | 2          | 54.686                                        | 395                | 21601             |
| 4 to 6                                                                                                                                                    | 2          | 39.275                                        | 500                | 19638             |
| 6 to 8                                                                                                                                                    | 2          | 39.275                                        | 615                | 24154             |
| 8 to 10                                                                                                                                                   | 2          | 39.275                                        | 740                | 29064             |
| 10 to 12                                                                                                                                                  | 2          | 39.275                                        | 875                | 34366             |
| 12 to 14                                                                                                                                                  | 2          | 39.275                                        | 1025               | 40257             |
| 14 to 16                                                                                                                                                  | 2          | 39.275                                        | 1180               | 46345             |
| <b>3. Cost of Steining</b>                                                                                                                                |            | 38.528                                        | 1100               | 42382             |
| <b>4. De-watering Charges</b>                                                                                                                             |            |                                               |                    | 7000              |
| <b>Total Cost (Rounded off)</b>                                                                                                                           |            |                                               |                    | <b>282100</b>     |
| Minimum Benefitting Area in Acres                                                                                                                         |            | 2.35                                          |                    |                   |
| Repayment                                                                                                                                                 |            | 5-7 years including grace period of 11 months |                    |                   |
| <b>Model 4 – Hardrock Areas</b>                                                                                                                           |            |                                               |                    |                   |
| <b>Sedimentary formations, Sand stones &amp; Lime stones</b>                                                                                              |            |                                               |                    |                   |
| <b>(Areas of Karimnagar, Nalgonda and Warangal)</b>                                                                                                       |            |                                               |                    |                   |

|                                                                                                                                       |                          |      |
|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------|
| <b>1. Basic Information</b>                                                                                                           | Outer Dia.(m)            | 4.9  |
| Suitable in hard rock areas-<br>Weathered Sand stones,<br>Limestone, Laterites etc. where<br>ground water level is within 10 m<br>bgl | Inner Dia.(m)            | 4    |
|                                                                                                                                       | Depth of the Well(m)     | 12   |
|                                                                                                                                       | Steining of the well(m)  | 5    |
|                                                                                                                                       | Thickness of Steining(m) | 0.45 |

**2. Cost of Excavation**

| Depth (m) | RMT | Quantity (m <sup>3</sup> ) | Rate/m <sup>3</sup> (₹) | Amount (₹) |
|-----------|-----|----------------------------|-------------------------|------------|
| 0 to 2    | 2   | 37.72                      | 315                     | 11882      |
| 2 to 4    | 2   | 37.72                      | 395                     | 14899      |
| 4 to 6    | 2   | 25.136                     | 500                     | 12568      |
| 6 to 8    | 2   | 25.136                     | 615                     | 15459      |
| 8 to 10   | 2   | 25.136                     | 740                     | 18601      |
| 10 to 12  | 2   | 25.136                     | 875                     | 21994      |

|                            |         |      |       |
|----------------------------|---------|------|-------|
| <b>3. Cost of Steining</b> | 31.4593 | 1100 | 34605 |
|----------------------------|---------|------|-------|

|                               |  |      |
|-------------------------------|--|------|
| <b>4. De-watering Charges</b> |  | 6000 |
|-------------------------------|--|------|

|                                 |               |
|---------------------------------|---------------|
| <b>Total cost (Rounded off)</b> | <b>136100</b> |
|---------------------------------|---------------|

|                                   |      |
|-----------------------------------|------|
| Minimum Benefitting Area in Acres | 1.19 |
|-----------------------------------|------|

|           |                                               |
|-----------|-----------------------------------------------|
| Repayment | 5-7 years including grace period of 11 months |
|-----------|-----------------------------------------------|

**Model 5 – Dugwells in Alluvial Areas**

**Adjoining areas of Krishna, Godavari River, other rivers/Streams and Head Reaches of Canal command areas)**

|                                                                                                                                                                       |                          |       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------|
| <b>1. Basic Information</b>                                                                                                                                           | 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 <sup>3</sup> ) | Rate/ m <sup>3</sup> (₹) | Amount (₹) |
|-----------|-----|----------------------------|--------------------------|------------|
| 0 to 2    | 2   | 16.087                     | 285                      | 4585       |
| 2 to 4    | 2   | 16.087                     | 345                      | 5550       |
| 4 to 6    | 2   | 16.087                     | 415                      | 6676       |
| 6 to 8    | 2   | 16.087                     | 490                      | 7883       |

|                                 |   |        |      |               |
|---------------------------------|---|--------|------|---------------|
| 8 to 10                         | 2 | 16.087 | 565  | 9089          |
| 10 to 12                        | 2 | 16.087 | 645  | 10376         |
| 12 to 14                        | 2 | 16.087 | 735  | 11824         |
| <b>3. Cost of Lining</b>        |   | 13.640 | 5500 | 75020         |
| <b>4. De-watering Charges</b>   |   |        |      | 7000          |
| <b>Total cost (Rounded off)</b> |   |        |      | <b>138100</b> |

Minimum Benefitting Area in Acres

1.49

Repayment

5-7 years including grace period of 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                                        | Rate (₹) | Amount (₹)    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|----------|---------------|
| <b>1. Drilling of bore well</b> 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                               | 950      | 114000        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Depth 120 m                                   |          |               |
| <b>2. Casing</b> -PVC casing pipe: Pressure- 6 kg/cm <sup>2</sup> , Diameter 180 mm                                                                                                                                                                                                                                                                                                                                                                          | Length 20 m                                   | 900      | 18000         |
| <b>3. Well cap (PVC)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                     | Diameter 180 mm                               | 300      | 300           |
| Sub total                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                               |          | 18300         |
| GST @ 18% on casing and Well Cap                                                                                                                                                                                                                                                                                                                                                                                                                             |                                               |          | 3294          |
| <b>Total cost (Rounded off)</b>                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |          | <b>135600</b> |
| Minimum Benefitting Area in Acres                                                                                                                                                                                                                                                                                                                                                                                                                            | 1.68                                          |          |               |
| Repayment                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 3-5 years including grace period of 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                                        | Rate (₹) | Amount (₹)      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|----------|-----------------|
| <b>1. Drilling:</b> Drilling of tube well with Rotary rig to finished dia of 311 mm (12 1/4") with a pilot bore of suitable dia may be 216 mm (8 1/2") 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 in charge officers. | Diameter 180 mm<br>Depth 120 m                | 120      | 156000          |
| De-watering charges                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                               | 6000     | 6000            |
| Compressor Charges @2500/hour                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1                                             | 2500     | 2500            |
| <b>Total Cost</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                               |          | 164500          |
| <b>2. PVC Plain Casing Pipe.</b><br>Pressure- 10 kg/cm <sup>2</sup> , Diameter- 175 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Length 70 m                                   | 1500     | 1,05,000        |
| <b>3. PVC casing pipe (Slotting)</b><br>Pressure- 10 kg/cm <sup>2</sup> , Diameter- 175 mm<br>Slot size-1/8" or 1/16"                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Length 50 m                                   | 1650     | 82,500          |
| <b>4. Well cap suitable to 180 mm. (OD) PVC pipe</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1 No.                                         | 700      | 700             |
| <b>5. M.S Clamp set</b> suitable to 180 mm (OD)PVC pipe                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1 No.                                         | 900      | 900             |
| <b>6. Bottom Dummy (CI)</b> suitable to 180 mm (OD) PVC casing pipe                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1 No.                                         | 700      | 700             |
| <b>Sub total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                               |          | <b>189800</b>   |
| GST @ 18%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                               |          | 34164           |
| <b>Total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                               |          | <b>3,88,464</b> |
| <b>Total cost (Rounded off)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                               |          | <b>388500</b>   |
| Minimum Benefitting Area in Acres                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 7.45                                          |          |                 |
| Repayment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 5-7 years including 11 months of grace period |          |                 |



**Model 3 – Filter Points in Alluvial areas - Filter point 125 mm**

| Particulars                                                                                                                                                                                                                                                                                                                                                                                   | Design (₹/m)                                   | Rate (₹) | Amount (₹)   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|----------|--------------|
| <b>1. Drilling</b> 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<br>Depth 20 m                  | 950      | 19000        |
| <b>2. Casing - PVC plain casing pipe</b> – Pressure 10 kg/cm <sup>2</sup><br>Diameter- 125 mm                                                                                                                                                                                                                                                                                                 | Length 14 m                                    | 1000     | 14000        |
| <b>3. PVC casing pipe (Slotting)-</b> Pressure -10 kg/ cm <sup>2</sup> ; Diameter- 125 mm                                                                                                                                                                                                                                                                                                     | Length 6 m                                     | 985      | 5910         |
| <b>4. Well cap</b> suitable to 125mm. (OD) PVC pipe                                                                                                                                                                                                                                                                                                                                           | 1 No.                                          | 700      | 700          |
| <b>5. M.S Clamp set</b> suitable to 125mm (OD)PVC pipe                                                                                                                                                                                                                                                                                                                                        | 1 No.                                          | 900      | 900          |
| <b>6. Bottom Dummy (CI)</b> suitable to 125mm (OD) PVC casing pipe                                                                                                                                                                                                                                                                                                                            | 1 No.                                          | 700      | 700          |
| <b>Sub total (2+3+4+5+6)</b>                                                                                                                                                                                                                                                                                                                                                                  |                                                |          | <b>22210</b> |
| GST @ 18% for items S No 2-6                                                                                                                                                                                                                                                                                                                                                                  |                                                |          | 3998         |
| <b>Total cost (Rounded off)</b>                                                                                                                                                                                                                                                                                                                                                               |                                                |          | <b>45300</b> |
| Minimum Benefitting Area in Acres                                                                                                                                                                                                                                                                                                                                                             | 0.89                                           |          |              |
| Repayment                                                                                                                                                                                                                                                                                                                                                                                     | 2- 3 years including 11 months of 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 @ 18 percent                |                       | 5685                                       | 6553         | 7826         | 7069         | 9446         |
| <b>Total cost (Rounded off)</b> |                       | <b>37300</b>                               | <b>43000</b> | <b>51300</b> | <b>46300</b> | <b>61900</b> |
| 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      | Pumpset               | 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          |
|        | Total                 | 72299        | 80604        | 91129         | 107572        |
|        | GST @ 18 percent      | 13014        | 14509        | 16403         | 19363         |
|        | <b>Rounded to</b>     | <b>85300</b> | <b>95100</b> | <b>107500</b> | <b>126900</b> |

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/cm <sup>2</sup> ) of 6m long | 663      | 25       | 16575        |
| 2      | Sprinkler coupler with foot baton assembly                                | 434      | 5        | 2170         |
| 3      | Sprinkler nozzles (1.7 to 2.8 kg/cm <sup>2</sup> )                        | 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 @ 5%                                                                  |          |          | 1120         |
|        | <b>Total cost (Rounded off)</b>                                           |          |          | <b>23500</b> |

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/cm <sup>2</sup> ), 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      | <b>Total cost (Rounded off)</b>                                                                                                                   | <b>66600</b> |

Repayment

3-5 years including 11 months grace period

**Model 3 – Drip Irrigation System (₹ per ha.)**

| Sl. no | Crop                  | Spacing (m) | Type of Drip | Unit Cost (12 mm) Incl of HCU | Unit Cost (16 mm) Incl of HCU | Repayment (Yrs) | Gestation |
|--------|-----------------------|-------------|--------------|-------------------------------|-------------------------------|-----------------|-----------|
| 1      | Mango/ Sapota         | 10 x 10     | Online       | 29858                         | 33500                         | 4               | 1 year    |
| 2      | Mango                 | 9 x 9       | Online       | 35136                         | 39278                         | 4               | 1 year    |
| 3      | Mango/Sapota/ Coconut | 8 x 8       | Online       | 37908                         | 42381                         | 4               | 1 year    |



|    |                                                                |                              |        |        |        |    |                          |
|----|----------------------------------------------------------------|------------------------------|--------|--------|--------|----|--------------------------|
| 4  | Mango/Cashew                                                   | 7 x 7                        | Online | 39780  | 44917  | 3  | 1 year                   |
| 5  | Mango/Cashew/<br>Sweet Orange/<br>Acidlime/Gauva<br>/Ber/ Amla | 6 x 6                        | Online | 41909  | 47708  | 3  | 1 year                   |
| 6  | Mango/Banana                                                   | 6 x 6                        | Inline | 42436  | 48100  | 3  | 1 year                   |
| 7  | Mango/Bamboo                                                   | 5 x 5                        | Online | 46736  | 53696  | 3  | 1 year                   |
| 8  | Banana                                                         | 5 x 5                        | Inline | 47442  | 50217  | 3  | 1 year                   |
| 9  | Mango- High<br>density                                         | 3 x 2                        | Online | 0      | 75886  | 6  | 3 years                  |
| 10 | Coco/Bamboo                                                    | 4 x 4                        | Online | 55442  | 57696  | 3  | 1 year                   |
| 11 | Pomegranate                                                    | 4.5 x 2.7                    | Online | 48537  | 56326  | 10 | 6 years                  |
| 12 | Papaya                                                         | 1.8 x 1.5                    | Online | 90453  | 104426 | 3  | 1 year                   |
| 13 | Papaya                                                         | 1.8 x 1.5                    | Inline | 88700  | 102300 | 3  | 1 year                   |
| 14 | Banana                                                         | 1.8 x 1.5                    | Inline | 87348  | 104550 | 3  | 1 year                   |
| 15 | Grapevine/<br>Bottle, Bitter<br>&Ridge Guard                   | 2.7 x 1.8                    | Online | 68634  | 78489  | 3  | 1 year                   |
| 16 | Grapevine/<br>Bottle, Bitter<br>&Ridge Guard                   | 2.7 x 1.8                    | Inline | 68854  | 73200  | 7  | 23 months                |
| 17 | Vegetables                                                     | 0.6 x 0.45                   | Inline | 118863 | 131028 | 4  | 6 months                 |
| 18 | Rose/<br>Jasmine/Cotton<br>/Mulberry/Medi<br>cinal Plants      | [(0.60<br>+1.20) x<br>0.6]   | Inline | 84193  | 91385  | 5  | 1 year                   |
| 19 | Other flowers                                                  | 1.0 x 0.30<br>or 0.45        | Inline | 127612 | 152866 | 5  | Depending<br>on the crop |
| 20 | Tobacco (Light<br>soils)                                       | 1.20 x<br>0.50               | Inline | 109922 | 131028 | 4  | 6 months                 |
| 21 | Tobacco (Black<br>soils)                                       | 0.75 x<br>0.50               | Inline | 87596  | 108092 | 4  | 6 months                 |
| 22 | Sugarcane                                                      | [(0.75 +<br>1.50) x<br>0.60] | Inline | 68930  | 80520  | 3  | 1 year                   |
| 23 | Sugarcane                                                      | [(0.60+1.2<br>0) x 0.60]     | Inline | 77143  | 79633  | 3  | 1 year                   |



|    |                                                                      |               |           |       |        |   |           |
|----|----------------------------------------------------------------------|---------------|-----------|-------|--------|---|-----------|
| 24 | Sugarcane Pit Method                                                 | [1.50 x 0.60] | Online    | 85956 | 97185  | 3 | 1 year    |
| 25 | High Density Apple, ber, gauva, pomegranate, Pa paya                 | 3 x 1.5       | Inline    | 0     | 79210  | 4 | 11 months |
| 26 | Oil Palm                                                             | 9 x 9         | Online    | 47700 | 53468  | 7 | 11 months |
| 27 | Oil Palm                                                             | 9 x 9         | Micro-jet | 48600 | 54900  | 7 | 5 years   |
| 28 | High Density-Mango, Guava, pomegranate, apple, ber Papaya, date palm | 5 x 3         | Online    | -     | 52960  | 3 | 1 year    |
| 29 | High Density-Mango, Guava, pomegranate, apple, ber Papaya, date palm | 5 x 2.5       | Online    | -     | 53120  | 3 | 1 year    |
| 30 | Flowers, tomato, chilli, brinjal, coloccasia                         | 3 x 3         | Inline    |       | 67107  | 5 | 6 months  |
| 31 | High Density-Mango, Guava, pomegranate, apple, ber Papaya, date palm | 3 x 2         | Online    |       | 75886  | 3 | 1 year    |
| 32 | Flowers, tomato, chilli, brinjal, coloccasia                         | 2.5 x 2.5     | Inline    |       | 76130  | 5 | 6 months  |
| 33 | Casurina, Drumstick                                                  | 2.5 x 2.5     | Online    |       | 82260  | 3 | 1 year    |
| 34 | Mulbery                                                              | 1.8 x 1.8     | Inline    |       | 91365  | 5 | 1 year    |
| 35 | Papaya/ Banana/ Mulbery                                              | 1.8 x 1.8     | Inline    | 86753 | 104686 | 3 | 1 year    |

|    |           |           |             |  |        |   |        |
|----|-----------|-----------|-------------|--|--------|---|--------|
| 36 | Sugarcane | 1.8 x 0.4 | Sub Surface |  | 92000  | 3 | 1 year |
| 37 | Sugarcane | 1.5 x 0.4 | Sub Surface |  | 106000 | 3 | 1 year |

**Model 4 – Pipeline or Distribution System**

| Area in ha/Acre    | Size of the Pipe       | Amount (₹)                              |                                  |
|--------------------|------------------------|-----------------------------------------|----------------------------------|
|                    |                        | Rigid Polyvinyl Chloride (RPVC6) kg/cm2 | RPVC6 kg/cm2                     |
| 1.00 ha/ 2.50 acre | Length-150 m Dia 63 mm | ₹17100 with accessories @ ₹ 95/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                                                      | 3.5  | 1500     | 5250         |
| 2      | Boulders (8 to 12 inches size) (Granitic/ Hard Material/ Field) to be filled up to 1.2 m                    | 10.8 | 625      | 6750         |
| 3      | 80-40 mm size jelly to be filled up to 0.4m                                                                 | 3.6  | 781.25   | 2812         |
| 4      | 40-20 mm size jelly to be filled up to 0.4m                                                                 | 3.6  | 1237.5   | 4455         |
| 5      | Charcoal layer of 0.1m covered with nylon mesh (cm)                                                         | 0.9  | 4000     | 3600         |
| 6      | Coarse Sand to be filled up to 0.7m                                                                         | 6.3  | 868.75   | 5473         |
| 7      | Casing pipe with holes including concrete base                                                              | 1    | 3200     | 3200         |
| 8      | Aquamesh in meters                                                                                          | 50   | 50       | 2500         |
| 9      | Nylon mesh 6 m                                                                                              | 1    | 420      | 420          |
| 10     | Size Stone masonry for safe wall 250 stones                                                                 | 4.5  | 5000     | 22500        |
| 11     | Cement including transport per bag                                                                          | 3    | 500      | 1500         |
| 12     | Casing pipe holding bracket with bolts and nuts/clamp                                                       | 1    | 520      | 520          |
| 13     | Labour for filling the materials (person days)                                                              | 9    | 425      | 3825         |
| 14     | Mason and labour for making protection wall (1 Mason per day cost Rs. 625, 1 Labour per day Rs. 425)-2 days | 2    | 1050     | 2100         |
| 15     | Diversion drain (cubic m) using machine                                                                     | 10   | 125      | 1250         |
| 16     | <b>Total</b>                                                                                                |      |          | <b>66155</b> |

|                                                                                                                                    |                          |       |       |                          |                          |            |              |            |
|------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------|-------|--------------------------|--------------------------|------------|--------------|------------|
| 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 <sup>3</sup>     |                          |            |              |            |
| 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 <sup>3</sup> ) | Rate/ M <sup>3</sup> (₹) | Labour (₹) | Material (₹) | Amount (₹) |
|                                                                                                                                    | Length                   | Width | Depth |                          |                          |            |              |            |
| Earth Work                                                                                                                         |                          |       |       |                          |                          |            |              |            |
| Diversion Drain                                                                                                                    | 15                       | 1     | 0.75  | 11.25                    | 317                      | 3566.3     | 0            | 3566       |
|                                                                                                                                    | 2.5                      | 2.5   | 1.2   | 7.5                      | 317                      | 2377.5     | 0            | 2377       |
| Middle Drain                                                                                                                       | 3                        | 1     | 0.75  | 2.25                     | 317                      | 713.25     | 0            | 713        |
|                                                                                                                                    | 4                        | 4     | 1.5   | 24                       | 317                      | 7608       | 0            | 7608       |
| Pipe Line – Trench                                                                                                                 | 6                        | 0.5   | 0.9   | 2.7                      | 317                      | 855.9      | 0            | 856        |
| Pipe Cost - 150 mm - Length - 6m including GST @ Rs.385/m                                                                          |                          |       |       |                          |                          | 0          | 2310         | 2310       |
| Misc.                                                                                                                              |                          |       |       |                          |                          | 0          | 1000         | 600        |
|                                                                                                                                    |                          |       |       |                          |                          | 15121      | 3310         | 18030      |
| Rounded off                                                                                                                        |                          |       |       |                          |                          |            |              | 18000      |

| Techno economic parameters |                         |                       |
|----------------------------|-------------------------|-----------------------|
| a                          | Average Annual Rainfall | 800 mm                |
| b                          | Catchment               | 5 ha                  |
| c                          | Run-off coefficient     | 0.25                  |
| d                          | Expected runoff         | 4000 m <sup>3</sup>   |
| e                          | Diameter                | 6 m                   |
| f                          | Depth of well           | 15 m                  |
| g                          | Volume of storage       | 847.80 m <sup>3</sup> |
| h                          | Command area            | 0.40 ha               |
| i                          | Unit Cost               | ₹18000                |
| 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 <sup>3</sup>                                                    | 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 <sup>2</sup>                                                                          | 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         |
| <b>Total cost (Rounded off)</b> |                                                                                                                                                  |          |          | <b>156000</b> |

#### 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 must 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 |                    |                 | Critical |                     |                     |
|----------------|--------------------|-----------------|----------|---------------------|---------------------|
| Sl.no          | District           | Mandal          | Sl.no    | District            | Mandal              |
| 1              | Adilabad           | Adilabad Urban  | 1        | Adilabad            | Mavala              |
| 2              | Hyderabad          | Charminar       | 2        | Hyderabad           | Secunderabad        |
| 3              | Hyderabad          | Golkonda        | 3        | Hyderabad           | Shaikpet            |
| 4              | Hyderabad          | Saidabad        | 4        | Hyderabad           | Musheerabad         |
| 5              | Hyderabad          | Asifnagar       | 5        | Hyderabad           | Nampally            |
| 6              | Hyderabad          | Ammerpet        | 6        | Hyderabad           | Maredpally          |
| 7              | Hyderabad          | Himayatnagar    | 7        | Hyderabad           | Bandlaguda          |
| 8              | Hyderabad          | Khairatabad     | 8        | Hyderabad           | Bahadurpura         |
| 9              | Hyderabad          | Amberpet        | 9        | Mahabubnagar        | Balanagar           |
| 10             | Khammam            | Raghunadhapalem | 10       | Medak               | Nizampet            |
| 11             | Medchal Malkajgiri | Balanagar       | 11       | Medchal Malkajgiri  | Keesara             |
| 12             | Medchal Malkajgiri | Malkajgiri      | 12       | Medchal Malkajgiri  | Bachpalle           |
| 13             | Medchal Malkajgiri | Quthbullapur    | 13       | Medchal Malkajgiri  | Muduchinthala pally |
| 14             | Medchal Malkajgiri | Kukatpally      | 14       | Nalgonda            | Chityala            |
| 15             | Nalgonda           | Munugode        | 15       | Sangareddy          | Jharasangam         |
| 16             | Nizamabad          | Nizamabad_South | 16       | Yadadri Bhuvanagiri | Alair               |
| 17             | Rangareddy         | Amangal         | 17       | Yadadri Bhuvanagiri | Mootakondur         |
| 18             | Rangareddy         | Serilingampally | 18       | Yadadri Bhuvanagiri | Rajapet             |
| 19             | Rangareddy         | Hayathnagar     |          |                     |                     |
| 20             | Rangareddy         | Chowdergudem    |          |                     |                     |
| 21             | Rangareddy         | Saroornagar     |          |                     |                     |
| 22             | Sangareddy         | Patancheruvu    |          |                     |                     |

| Over Exploited |                        |             | Critical |          |        |
|----------------|------------------------|-------------|----------|----------|--------|
| Sl.no          | District               | Mandal      | Sl.no    | District | Mandal |
| 23             | Yadadri<br>Bhuvanagiri | Narayanapur |          |          |        |
| 24             | Yadadri<br>Bhuvanagiri | Atmakur_M   |          |          |        |

- 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 groundwater 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 |
| d. | 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 purpose 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 kilo-volt-Amperes Reactive (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-II) and IS-7092 (Part-II) 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 installation agency preparing a plan as well as also layout and design of the system and indicate cost of each item.
- The installation agency should guarantee for the operation of the system for minimum of 2 years and ensure timely and proper post sales service for the satisfactory working of the system.





## Chapter 2

# Land Development

As agriculture increasingly faces the challenges of climate variability, natural resource degradation and growing demand for sustainable production systems, land development has assumed critical importance in enhancing the resilience and productivity of the farm sector. Scientific land development interventions contribute to improved soil health, efficient water management, enhanced groundwater recharge, reduced land degradation, and higher farm productivity.

NABARD, through the Rural Infrastructure Development Fund (RIDF), continues to support State Governments in creating and strengthening irrigation infrastructure across the country. The expansion of irrigation facilities and development of new command areas are expected to unlock significant opportunities for land development activities at the farm level, thereby stimulating demand for institutional credit and capital investment.

Recognizing the evolving investment requirements and rising implementation costs, NABARD has revised the unit costs of various land development activities for FY 2026-27 to facilitate realistic credit planning and promote sustainable agricultural growth.



| Sl. no | Item of Investment                                                    | Amount (₹) | Repayment (Yrs) | Gestation (Yrs) |
|--------|-----------------------------------------------------------------------|------------|-----------------|-----------------|
| 1      | Contour Bunding (Slope 2-4%; area of land: 1 acre (4040 sq. m)        | 24250      | 3               | 1               |
| 2      | Gully plugging with stone (5 m)                                       | 8564       | 3               | 1               |
| 3      | OFD works for 2-3% slope (1 acre)                                     | 54900      | 3               | 1               |
| 4      | Reclamation of saline/ alkaline soils (1 acre)                        | 28000      | 3               | 1               |
| 5      | NADEP compost unit (10'x6'x3') including operational cost             | 34300      | 3               | 1               |
| 6      | Farm Ponds 10m x 10m x 2.5m (by machine)                              | 67500      | 5               | 1               |
| 7      | Farm Ponds 18mx18mx3m (by machine)                                    | 158800     | 5               | 1               |
| 8      | Tiny vermicompost unit (1.8 TPA)                                      | 41300      | 5               | 1               |
| 9      | Mini vermicompost unit - 20 TPA; 3 units with 4 cycles of 75-85 days) | 282700     | 5               | 1               |
| 10     | Barbed wire fencing (cement poles) for 100 m                          | 66900      | 5               | 1               |
| 11     | Chain linked diamond mesh wire fencing (cement poles) for 100 m       | 84700      | 5               | 1               |
| 12     | Tank silt application (only transport & application) - 0.02 m-ha      | 37600      | 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 department concerned 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.



## Chapter 3

# Integrated Farming System

Integrated Farming System (IFS) is a sustainable and climate-resilient approach that combines crop production with allied activities such as horticulture, livestock, fisheries, and poultry to create a mutually supportive and resource-efficient farming ecosystem. IFS enhances productivity, improves resource utilization, and strengthens farmers' income security.

The Government of India and the Government of Telangana are promoting integrated farming through various schemes and convergence initiatives. Special emphasis is being placed on integrating micro-irrigation, livestock rearing, and diversified cropping systems to improve farm resilience and profitability.

IFS enables farmers to generate multiple income streams, reduce dependence on a single enterprise, and mitigate production and market risks. Recognizing its potential for sustainable livelihood enhancement, NABARD has included three region-specific Integrated Farming System models catering to the agro-climatic conditions and farming needs of northern, central, and southern Telangana for FY 2026-27.





**Model I – Central Telangana**

| <b>Farming System</b>                                                                                                                                                                                                               |                 | <b>Area (acre)</b> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------|
| Crops (Banana and Groundnut)                                                                                                                                                                                                        |                 | 0.50               |
| Dairy (2 Murrah 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             |
| <b>Total</b>                                                                                                                                                                                                                        |                 | <b>1.00</b>        |
| Backyard poultry (4 batches of 50 Birds each)                                                                                                                                                                                       |                 | 50 Sq feet         |
| <b>Particulars</b>                                                                                                                                                                                                                  | <b>Rate (₹)</b> | <b>Amount (₹)</b>  |
| <b>a) Fixed costs</b>                                                                                                                                                                                                               |                 |                    |
| Cost of establishment of Buffalo unit (1+1)                                                                                                                                                                                         | 126700          | 253400             |
| Cost of establishment of Sheep rearing unit (20+1)                                                                                                                                                                                  | 17000           | 357000             |
| Banana – 0.50 acre                                                                                                                                                                                                                  | 108700          | 54350              |
| Agro-Silviculture (Forest trees) – 0.1125 acre                                                                                                                                                                                      | 48000           | 5400               |
| Cost of chicks and equipment (50 birds)-sq ft                                                                                                                                                                                       | 80              | 4000               |
| <b>Sub total</b>                                                                                                                                                                                                                    |                 | <b>674150</b>      |
| <b>b) Recurring cost</b>                                                                                                                                                                                                            |                 |                    |
| Banana - 0.50 acre                                                                                                                                                                                                                  | <b>20000</b>    | 10000              |
| Groundnut (Intercrop) - 0.50 acre                                                                                                                                                                                                   | 25000           | 12500              |
| Working capital for Buffalo unit (1+1)                                                                                                                                                                                              | 25000           | 50000              |
| Working capital for sheep unit (20+1)                                                                                                                                                                                               | 1500            | 31500              |
| Working capital for Backyard poultry (50 birds)- sq ft                                                                                                                                                                              | 200             | 40000              |
| <b>Sub total</b>                                                                                                                                                                                                                    |                 | <b>144000</b>      |
| <b>Total cost (Rounded off)</b>                                                                                                                                                                                                     |                 | <b>818000</b>      |
| # 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 to 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          |
| <b>Total</b>                                       |          | <b>1.00</b>   |
| Backyard Poultry (4 batches of 50 Birds each)      |          | 50 sq feet    |
| Particulars                                        | Rate (₹) | Amount (₹)    |
| <b>a) Fixed costs</b>                              |          |               |
| Cost of establishment of Buffalo unit (1+1)        | 126700   | 253400        |
| Cost of chick and equipment etc. (50 birds/sq ft.) | 80       | 4000          |
| <b>Sub total</b>                                   |          | <b>257400</b> |
| <b>b) Recurring cost</b>                           |          |               |
| Kharif Paddy Cost of Cultivation - 0.50 acre       | 45000    | 22500         |
| Rabi Paddy Cost of Cultivation - 0.50 acre         | 42000    | 21000         |
| Brinjal Cost of Cultivation - 0.10 acre            | 43000    | 4300          |
| maize Cost of cultivation - 0.25 acre              | 32000    | 8000          |
| Black gram cost of cultivation - 0.10 acre         | 19000    | 1900          |
| Working capital for Buffalo unit (1+1)             | 25000    | 50000         |
| Working capital for Backyard poultry – 200 nos     | 200      | 40000         |
| <b>Sub total</b>                                   |          | <b>147700</b> |
| <b>Total cost (Rounded off)</b>                    |          | <b>405000</b> |



**Model III – Northern Telangana**

| <b>Farming System</b>                                    |                 | <b>Area (acre)</b> |
|----------------------------------------------------------|-----------------|--------------------|
| 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             |
| <b>Total</b>                                             |                 | <b>1.00</b>        |
| <b>Particulars</b>                                       | <b>Rate (₹)</b> | <b>Amount (₹)</b>  |
| <b>a) Fixed costs</b>                                    |                 |                    |
| Cost of establishment of Buffalo unit (02)               | 126700          | 253400             |
| <b>Sub total</b>                                         |                 | <b>253400</b>      |
| <b>b) Recurring cost</b>                                 |                 |                    |
| Kharif Paddy Cost of Cultivation - 0.617 acre            | 45000           | 27765              |
| Rabi Paddy Cost of Cultivation - 0.617 acre              | 42000           | 25914              |
| Red gram Cost of Cultivation - 0.049 acre                | 23000           | 1127               |
| Tomato Cost of cultivation - 0.049 acre                  | 43000           | 2107               |
| Ridge guard (intercrop) cost of cultivation - 0.025 acre | 36000           | 900                |
| Working capital for Buffalo unit (02)                    | 25000           | 50000              |
| <b>Sub total</b>                                         |                 | <b>107813</b>      |
| <b>Total cost (Rounded off)</b>                          |                 | <b>361000</b>      |

**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.



## Chapter 4

# Plantation & Horticulture

Telangana's diverse agro-climatic conditions and expanding irrigation coverage provide a strong foundation for horticulture-led agricultural growth. The State is a major producer of fruits, vegetables, spices, flowers, and plantation crops, with mango, sweet orange, acid lime, guava, pomegranate, turmeric, chilli, tomato, and oil palm emerging as key horticultural commodities.

Horticulture occupies over 12 lakh acres in Telangana and contributes significantly to agricultural diversification, value addition, export potential, and farmers' income enhancement. The sector offers substantial opportunities for investment in high-value crops, protected cultivation, post-harvest management, and value-chain development.

Recognizing the growing demand for diversified horticultural enterprises, NABARD has revised the unit costs for Plantation and Horticulture activities for FY 2026-27. Unit costs for emerging high-value crops such as Fig and Avocado have also been introduced to support crop diversification and market-oriented horticulture in the State.



| Sl. no | Crops                                            | Unit cost per acre (₹) | Spacing (m) | Plant Population (in Nos) | Repayment (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     | Fig                                              | 143400                 | 4 x 2.5     | 400                       | 4               | 2                           |
| 13     | Avacado                                          | 271000                 | 6 x 6       | 111                       | 4               | 2                           |
| 14     | Vegetable cultivation under Pandal system per ha | 374000                 | -           | -                         | -               | -                           |





|       |                                                       |        |        |       |       |       |
|-------|-------------------------------------------------------|--------|--------|-------|-------|-------|
|       | 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      |        |       |       |       |
|       | 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                                    | 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      |        |       |       |       |
|       | 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      |        |       |       |       |
|       | 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      |        |       |       |       |
|       | 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    |        |       |       |       |
| (₹)   |                                                                   |        |        |       |       |       |
| 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      |        |       |       |       |
|       | Total cost (rounded off)                                          | 135000 |        |       |       |       |

|              |                                                                   |                    |               |              |              |              |            |
|--------------|-------------------------------------------------------------------|--------------------|---------------|--------------|--------------|--------------|------------|
|              | <b>Crop : Tissue Culture Banana</b>                               |                    |               |              |              |              |            |
|              | <b>Varieties : Grand Naine</b>                                    |                    |               |              |              |              |            |
|              | <b>Unit / Area (sq m)</b>                                         | <b>4000</b>        | <b>1 Acre</b> |              |              |              |            |
|              | <b>Spacing (m)</b>                                                | <b>1.65 x 1.65</b> |               |              |              |              |            |
|              | <b>No. of Plants</b>                                              | <b>1470</b>        |               |              |              |              |            |
|              |                                                                   |                    |               |              |              |              | <b>(₹)</b> |
| <b>Sl.no</b> | <b>Particulars</b>                                                | <b>Yr-1</b>        | <b>Yr-2</b>   | <b>Yr-3</b>  | <b>Yr-4</b>  | <b>Yr-5</b>  |            |
| <b>A</b>     | <b>Labour</b>                                                     |                    |               |              |              |              |            |
| 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         |            |
|              | <b>Subtotal-a</b>                                                 | <b>36600</b>       | <b>15800</b>  | <b>15800</b> | <b>8000</b>  | <b>8800</b>  |            |
| <b>B</b>     | <b>Material</b>                                                   |                    |               |              |              |              |            |
| 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            |            |
|              | <b>Subtotal-b</b>                                                 | <b>75330</b>       | <b>24908</b>  | <b>24908</b> | <b>22950</b> | <b>23150</b> |            |
|              | <b>Total a+b</b>                                                  | <b>111930</b>      | <b>40708</b>  | <b>40708</b> | <b>30950</b> | <b>31950</b> |            |
| <b>C</b>     | Miscellaneous expenses                                            | 700                |               |              |              |              |            |
| <b>D</b>     | <b>Total cost (a+b+c)</b>                                         | <b>112630</b>      | <b>40708</b>  | <b>40708</b> | <b>30950</b> | <b>31950</b> |            |
| <b>E</b>     | Number of years capitalization (Yrs.)                             | 1                  |               |              |              |              |            |
|              | <b>Total cost (rounded off)</b>                                   | <b>112600</b>      |               |              |              |              |            |

|       |                                                                          |        |        |       |       |       |
|-------|--------------------------------------------------------------------------|--------|--------|-------|-------|-------|
|       | 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      |        |       |       |       |
|       | 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       |        |       |       |       |
|       | Total cost (rounded off)                                       | 140500  |        |       |       |       |

|              |                                                                   |                  |               |              |              |              |
|--------------|-------------------------------------------------------------------|------------------|---------------|--------------|--------------|--------------|
|              | <b>Crop : Drumstick</b>                                           |                  |               |              |              |              |
|              | <b>Varieties : PKM- 1</b>                                         |                  |               |              |              |              |
|              | <b>Unit / Area (sq m)</b>                                         | <b>4000</b>      | <b>1 Acre</b> |              |              |              |
|              | <b>Spacing (m)</b>                                                | <b>1.8 x 1.8</b> |               |              |              |              |
|              | <b>No. of Plants</b>                                              | <b>1235</b>      |               |              |              |              |
| <b>(₹)</b>   |                                                                   |                  |               |              |              |              |
| <b>Sl.no</b> | <b>Particulars</b>                                                | <b>Yr-1</b>      | <b>Yr-2</b>   | <b>Yr-3</b>  | <b>Yr-4</b>  | <b>Yr-5</b>  |
| <b>a</b>     | <b>Labour</b>                                                     |                  |               |              |              |              |
| 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         |
|              | <b>Subtotal-a</b>                                                 | <b>25100</b>     | <b>10900</b>  | <b>10900</b> | <b>6200</b>  | <b>6800</b>  |
| <b>b</b>     | <b>Material</b>                                                   |                  |               |              |              |              |
| 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          |
|              | <b>Subtotal-b</b>                                                 | <b>52755</b>     | <b>11826</b>  | <b>13153</b> | <b>17764</b> | <b>19547</b> |
| <b>c</b>     | <b>Total cost (a+b)</b>                                           | <b>59692</b>     | <b>19786</b>  | <b>20786</b> | <b>17432</b> | <b>18232</b> |
| <b>d</b>     | Number of years capitalization (Yrs.)                             | 1                |               |              |              |              |
|              | <b>Total cost (rounded off)</b>                                   | <b>60000</b>     |               |              |              |              |

|       |                                                                                              |            |        |       |       |
|-------|----------------------------------------------------------------------------------------------|------------|--------|-------|-------|
|       | Crop : Oil palm                                                                              |            |        |       |       |
|       | Varieties: Tenera Hybrid                                                                     |            |        |       |       |
|       | Unit / Area (sq m)                                                                           | 4000       | 1 Acre |       |       |
|       | Spacing (m)                                                                                  | 9 x 9 x 9  |        |       |       |
|       | No. of Plants                                                                                | 57         |        |       |       |
|       | 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                                                                                  |            |        |       |       |
| a     | Nitrogen(N)                                                                                  | 298        | 595    | 895   | 894   |
| b     | Phosphorous (P)                                                                              | 321        | 641    | 962   | 962   |
| c     | Potassium(K)                                                                                 | 228        | 456    | 684   | 855   |
| d     | Micronutrients – Magnesium (MgSO4)                                                           | 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          |        |       |       |
|       | Total cost (rounded off)                                                                     | 135000     |        |       |       |



|                                       |                                                                                     |                  |               |             |
|---------------------------------------|-------------------------------------------------------------------------------------|------------------|---------------|-------------|
|                                       | <b>Crop : Dragon fruit</b>                                                          |                  |               |             |
|                                       | <b>Varieties: PKM- 1</b>                                                            |                  |               |             |
|                                       | <b>Unit / Area (sq m)</b>                                                           | <b>4000</b>      | <b>1 Acre</b> |             |
|                                       | <b>Spacing (m)</b>                                                                  | <b>2.5 x 2.5</b> |               |             |
|                                       | <b>No. of Plants</b>                                                                | <b>2560</b>      |               |             |
|                                       |                                                                                     |                  |               |             |
|                                       |                                                                                     |                  |               | (₹)         |
| <b>Sl.no</b>                          | <b>Particulars</b>                                                                  | <b>Yr-1</b>      | <b>Yr-2</b>   |             |
| <b>a</b>                              | <b>Material</b>                                                                     |                  |               |             |
| 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             |             |
|                                       | <b>Subtotal-a</b>                                                                   | <b>595835</b>    | <b>17254</b>  |             |
| b                                     | Labour                                                                              | 30040            | 18400         |             |
|                                       | <b>Subtotal-b</b>                                                                   | <b>30040</b>     | <b>18400</b>  |             |
| <b>c</b>                              | <b>Total a+b</b>                                                                    | <b>625875</b>    | <b>35654</b>  |             |
| <b>d</b>                              | Number of years capitalization (Yrs.)                                               | <b>2</b>         |               |             |
|                                       | <b>Total cost (rounded off)</b>                                                     | <b>661500</b>    |               |             |
| <b>Yield and income parameters:</b>   |                                                                                     |                  |               |             |
| <b>Yield &amp; Price - Assumption</b> | <b>Yr-1</b>                                                                         | <b>Yr-2</b>      | <b>Yr-3</b>   | <b>Yr-4</b> |
| 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      |

|        |                                                                   |           |        |       |       |       |       |
|--------|-------------------------------------------------------------------|-----------|--------|-------|-------|-------|-------|
|        | Crop: Fig                                                         |           |        |       |       |       |       |
| -      | Varieties: Brown Turkey, Deanna, Poona Red                        |           |        |       |       |       |       |
|        | Unit/Area (sq m)                                                  | 4000      | 1 Acre |       |       |       |       |
|        | Spacing (m)                                                       | 4.0 x 2.5 |        |       |       |       |       |
|        | No. of Plants                                                     | 400       |        |       |       |       |       |
| (₹)    |                                                                   |           |        |       |       |       |       |
| Sl. no | Particulars                                                       | Yr-1      | Yr-2   | Yr-3  | Yr-4  | Yr-5  | Yr-6  |
| a      | Labour                                                            |           |        |       |       |       |       |
| 1      | Land Clearing & Development                                       | 4000      | 0      | 0     | 0     | 0     | 0     |
| 2      | Layout and Digging of Pits                                        | 12000     | 1000   | 0     | 0     | 0     | 0     |
| 3      | Filling of pits                                                   | 3000      | 600    | 0     | 0     | 0     | 0     |
| 4      | Planting & Plant Support (staking)                                | 2000      | 1000   | 0     | 0     | 0     | 0     |
| 5      | Fertilizers Application                                           | 2000      | 2000   | 2500  | 2500  | 2500  | 2500  |
| 6      | Plant protection                                                  | 1200      | 1500   | 2100  | 2400  | 2400  | 2400  |
| 7      | Irrigation                                                        | 600       | 600    | 900   | 2400  | 2400  | 2400  |
| 8      | Earthing up, Weeding, pruning & other Intercultural Operations    | 3000      | 3000   | 3000  | 3000  | 3600  | 3600  |
| 9      | Harvesting, Carriage & Packaging Cost                             | 0         | 0      | 1500  | 1800  | 2400  | 2400  |
|        | Subtotal-a                                                        | 27800     | 9700   | 10000 | 12100 | 13300 | 13300 |
| b      | Material                                                          |           |        |       |       |       |       |
| 1      | Planting Material (including transportation) - Seedling/Rootstock | 18000     | 1755   | 0     | 0     | 0     | 0     |
| 2      | Farmyard Manure / Vermicomposting                                 | 3500      | 3500   | 3500  | 7000  | 8100  | 8100  |

|          |                                                         |               |              |              |              |              |              |
|----------|---------------------------------------------------------|---------------|--------------|--------------|--------------|--------------|--------------|
| 3        | Nitrogen(N)                                             | 702           | 2106         | 2106         | 2106         | 2106         | 2106         |
| 5        | Phosphorous (P)                                         | 1431          | 3578         | 3578         | 3578         | 3578         | 3578         |
| 6        | Potassium(K)                                            | 2025          | 2025         | 2025         | 2025         | 2025         | 2025         |
| 7        | Irrigation<br>(diesel/electricity/lumpsum requirements) | 1000          | 1500         | 2000         | 2000         | 2000         | 2000         |
| 8        | Plant protection                                        | 900           | 1500         | 2100         | 2400         | 2400         | 2400         |
| 9        | Drip Irrigation Facility                                | 30000         | 0            | 0            | 0            | 0            | 0            |
|          | <b>Subtotal-b</b>                                       | <b>57558</b>  | <b>15964</b> | <b>15309</b> | <b>19109</b> | <b>20209</b> | <b>20209</b> |
| <b>c</b> | <b>Total cost (a+b)</b>                                 | <b>85358</b>  | <b>25664</b> | <b>25309</b> | <b>31209</b> | <b>33509</b> | <b>33509</b> |
| d        | Miscellaneous expenditure                               | 7000          |              |              |              |              |              |
| <b>e</b> | Number of years capitalization (Yrs.)                   | 3             |              |              |              |              |              |
|          | <b>Total cost (rounded off)</b>                         | <b>143400</b> |              |              |              |              |              |

**Yield and income parameters:**

| <b>Yield &amp; Price – Assumption</b> | <b>Yr-1</b> | <b>Yr-2</b> | <b>Yr-3</b>   | <b>Yr-4</b>   | <b>Yr-5</b>   | <b>Yr-6</b>   |
|---------------------------------------|-------------|-------------|---------------|---------------|---------------|---------------|
| Yield per tree (Kg)                   | 0           | 0           | 10            | 15            | 15            | 15            |
| Yield per unit (Kg/Acre)              | 0           | 0           | 4000          | 6000          | 6000          | 6000          |
| Sale Price (₹/Kg)                     |             |             | 50            | 50            | 50            | 50            |
| Income (₹ per acre)                   | 0           | 0           | 200000        | 300000        | 300000        | 300000        |
| <b>Total Income</b>                   |             |             | <b>200000</b> | <b>300000</b> | <b>300000</b> | <b>300000</b> |



|                              |                                       |        |        |       |       |       |       |       |  |
|------------------------------|---------------------------------------|--------|--------|-------|-------|-------|-------|-------|--|
|                              |                                       |        |        |       |       |       |       |       |  |
|                              | Crop: Avacado                         |        |        |       |       |       |       |       |  |
|                              | Varieties:                            |        |        |       |       |       |       |       |  |
|                              | Unit/Area (sq m)                      | 4000   | 1 Acre |       |       |       |       |       |  |
|                              | Spacing (m)                           | 6 x 6  |        |       |       |       |       |       |  |
|                              | No. of Plants                         | 111    |        |       |       |       |       |       |  |
| (₹)                          |                                       |        |        |       |       |       |       |       |  |
| Sl. no                       | Particulars                           | Yr-1   | Yr-2   | Yr-3  | Yr-4  | Yr-5  | Yr-6  | Yr-7  |  |
| a                            | Labour                                |        |        |       |       |       |       |       |  |
| 1                            | Land Preparation & Digging            | 25000  | 0      | 0     | 0     | 0     | 0     | 0     |  |
| 2                            | Planting Material & Planting          | 30000  | 6000   | 3000  | 0     | 0     | 0     | 0     |  |
| 3                            | Intercultural Operations              | 15000  | 10000  | 10000 | 10000 | 10000 | 10000 | 10000 |  |
| 4                            | Drip Irrigation & Fertigation         | 70000  | 0      | 0     | 10000 | 10000 | 10000 | 10000 |  |
| 5                            | Inputs (Manures & Fertilizers)        | 25000  | 20000  | 20000 | 20000 | 20000 | 20000 | 20000 |  |
| 6                            | Pesticides & Growth Regulators        | 5000   | 10000  | 15000 | 15000 | 15000 | 15000 | 15000 |  |
| 7                            | Cost of Labour                        | 25000  | 15000  | 15000 | 15000 | 15000 | 15000 | 15000 |  |
| 8                            | Harvesting Charges                    | 0      | 0      | 5000  | 10000 | 10000 | 10000 | 10000 |  |
| 9                            | Transportation Charges                | 0      | 0      | 0     | 5000  | 5000  | 5000  | 5000  |  |
| 10                           | Miscellaneous                         | 10000  | 5000   | 5000  | 5000  | 5000  | 5000  | 5000  |  |
|                              | Total Cost                            | 205000 | 66000  | 73000 | 90000 | 90000 | 90000 | 90000 |  |
| b                            | Number of years capitalization (Yrs.) | 2      |        |       |       |       |       |       |  |
|                              | Total cost (rounded off)              | 271000 |        |       |       |       |       |       |  |
| Yield and income parameters: |                                       |        |        |       |       |       |       |       |  |

| <b>Yield &amp; Price – Assumption</b> | <b>Yr-1</b> | <b>Yr-2</b> | <b>Yr-3</b>  | <b>Yr-4</b>   | <b>Yr-5</b>   | <b>Yr-6</b>   | <b>Yr-7</b>   |
|---------------------------------------|-------------|-------------|--------------|---------------|---------------|---------------|---------------|
| Yield per acre                        | 0           | 0           | 0.25         | 3             | 3             | 3             | 3             |
| Yield per unit (ton)                  | 0           | 0           | 0.25         | 3             | 3             | 3             | 3             |
| Sale Price (₹/ton)                    |             |             | 200000       | 200000        | 200000        | 200000        | 200000        |
| Income (₹ per acre)                   | 0           | 0           | 50000        | 600000        | 600000        | 600000        | 600000        |
| <b>Total Income</b>                   |             |             | <b>50000</b> | <b>600000</b> | <b>600000</b> | <b>600000</b> | <b>600000</b> |

**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 Telangana have taken up dragon fruit cultivation in Sangareddy and Medak districts.
- Dept. of Hort. submitted the proposal for fixation of unit cost considering agro-climatic suitability and potential market. The techno-economic parameters were provided by Hort. University.

**Key technical aspects include:**

- It's a cactus group plant that adapts 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 farmer's 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         |
|    | <b>Total cost</b>                  |      |     |      | <b>292900</b> |

#### Detailed Unit Cost of Permanent Pandal (1 Acre)

| Sl.no | Particulars                                    | Amount (₹)    |
|-------|------------------------------------------------|---------------|
| 1     | Establishment of Permanent Pandal              | 292900        |
| 2     | Land preparation and miscellaneous expenditure | 2300          |
| 3     | Mulching                                       | 11200         |
| 4     | Cost of Vegetable seedlings/seeds              | 13000         |
| 5     | Organic Manures                                | 12000         |
| 6     | Thaiwan Sprayer                                | 18500         |
| 7     | Trellis                                        | 5000          |
| 8     | Fertilizers, Fungicides, Pesticides and        | 9100          |
| 9     | Plastic crates                                 | 10000         |
|       | <b>Total cost</b>                              | <b>374000</b> |

#### 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.



## Chapter 5

### Forestry

Forestry plays a pivotal role in promoting ecological sustainability, enhancing climate resilience, and supporting rural livelihoods. It contributes significantly to soil and water conservation, biodiversity protection, carbon sequestration, and the overall health of natural ecosystems.

Telangana has a total forest cover of 27,688 square kilometers, accounting for 24.69% of its geographical area, surpassing the national average of 23.59%, which offers considerable scope for investments in forestry and agroforestry interventions. Such investments not only strengthen environmental conservation efforts but also create sustainable income opportunities for rural households.

Recognizing its developmental and economic potential, NABARD continues to support forestry and agroforestry activities through institutional credit and refinance assistance. Accordingly, the unit costs for forestry and agroforestry activities have been updated for FY 2026-27 to facilitate realistic credit planning and promote sustainable natural resource management in the State.

| Sl. No | Type of Plantation                                                       | Spacing (m) | Population (per ha)      | Amount (₹) | Repayment (Yrs) | Gestation (Yrs) |
|--------|--------------------------------------------------------------------------|-------------|--------------------------|------------|-----------------|-----------------|
| 1      | Melia dubia                                                              | 3 x 3       | 1111                     | 140000     | 7               | 6               |
| 2      | Bamboo                                                                   | 5 x 5       | 400                      | 130000     | 8               | 5               |
| 3      | Teak                                                                     | 2 x 2       | 2500                     | 150000     | 13              | 7               |
| 4      | Jamun                                                                    | 8 x 8       | 156                      | 130000     | 7               | 4               |
| 5      | Eucalyptus                                                               | 3 x 2       | 1667                     | 135000     | 7               | 6               |
| 6      | Casuarina                                                                | 1.50 x 1.50 | 4444                     | 110000     | 4               | 3               |
| 7      | Subabul                                                                  | 2 x 2       | 2500                     | 100000     | 4               | 3               |
| 8      | Sandalwood (with Casuarina)                                              | 3.50 x 1.75 | 320 sandal+320 Casuarina | 177000     | 15/4*           | 14/3*           |
| 9      | Teak (bund plantation)- Square (400m with each side of the plot is 100m) | 2 x 2       | 100/ha                   | 21300      | 13              | 12              |
| 10     | Pongamia Pinnata (Biofuel Crop)                                          | 4 x 5       | 200/acre                 | 123000     | 12              | 7               |

*\*For Casuarina and Sandalwood respectively.*



## Chapter 6

### Sericulture & Honeybee rearing

Sericulture is an important agro-based activity in Telangana that integrates agricultural production with value-added processing, generating employment and income opportunities for rural households. The State is known to produce Mulberry and Tussar silk. Honeybee rearing complements agriculture by enhancing pollination and improving crop productivity. In view of their livelihood and economic potential, NABARD has revised the unit costs for these activities for FY 2026-27.

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



**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 | 80700          |
| 3           | Rearing house (RCC) - 50' x 20' x 15'                                                                                   | 1000 sq. ft    | 1000000        |
| 4           | Rearing cost for first batch (3 cycles)                                                                                 | 300 DFLs       | 21500          |
|             | <b>Total cost (rounded off)</b>                                                                                         |                | <b>1245000</b> |
| <b>Note</b> | a) Repayment: 4 years with 6 months moratorium<br>b) Labour cost per man day is considered in the range of ₹240 to ₹400 |                |                |

**Chawki Rearing Centre**

| Sl.no       | Item/Activity                                                                                                                                                                                                                                                                             | Unit Size       | Amount (₹)     |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------|
| 1           | Mulberry garden establishment                                                                                                                                                                                                                                                             | 2 acres         | 143020         |
| 2           | Rearing equipment with Incubation centre (200 sqft)                                                                                                                                                                                                                                       | 5000 DFLs/batch | 940000         |
| 3           | Rearing house (RCC) - 50' x 20' x 15'                                                                                                                                                                                                                                                     | 1000 sq. ft     | 1000000        |
| 4           | Rearing cost for first batch (3 cycles)                                                                                                                                                                                                                                                   | 5000 DFLs       | 195000         |
|             | <b>Total cost (rounded off)</b>                                                                                                                                                                                                                                                           |                 | <b>2278000</b> |
| <b>Note</b> | a) Rearing cost per batch is ₹65000/- and capitalization of 3 batches is considered which works out to ₹195000/-<br>b) Repayment: 3 years with 6 months moratorium<br>c) Margin money considered – 10% of TFO<br>d) 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    |
| <b>Note</b> | a) Machinery with Applicable GST<br>b) Repayment: 7 years with maximum of 6 months moratorium |            |

**Honeybee rearing**

| Sl.no       | Activity                                      | Amount (₹)   |
|-------------|-----------------------------------------------|--------------|
| 1           | 10 box model                                  |              |
|             | <b>Total cost (rounded off)</b>               | <b>63500</b> |
| <b>Note</b> | 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 sources of irrigation while financing mulberry cultivation under irrigated conditions.
- Improved high yielding varieties 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 worm eggs may be ensured.
- The equipment financed under the scheme for rearing silkworms should comply with the specifications of state Department of Sericulture and match with the rearing programme contemplated by the beneficiary.
- 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.
- 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.





## Chapter 7

# Animal Husbandry

Animal Husbandry is a key pillar of the rural economy, providing sustainable livelihoods, income diversification, and employment opportunities, particularly for small and marginal farmers. Its resilience during climatic and market uncertainties makes it an important component of sustainable agriculture.

The livestock sector has emerged as one of the fastest-growing segments of Indian agriculture, contributing significantly (30% of the total agricultural GDP) to agricultural value addition and rural incomes. In Telangana, livestock contributes over 41 per cent to the primary sector and supports the livelihoods of nearly 29 lakh families. The State ranks among the leading producers of sheep, poultry, eggs, milk, and meat, reflecting the sector's strong growth potential. At present, the State consists of Sheep population (190.63 lakh), Poultry population (799.99 lakh), Buffalo population (42.26 lakhs), Goat population (49.35 lakh), Cattle (42.31 lakh) and Pig population (1.78 lakh). As per advanced estimates for 2025-26, the state's milk production stood at 6.16 million tonnes, egg production - 20515 million eggs, meat production 1175 thousand tonnes (third major meat producing state).



Given its vital role in livelihood enhancement, nutritional security, and rural prosperity, Animal Husbandry continues to offer substantial opportunities for investment and institutional credit. Accordingly, NABARD has revised the unit costs for activities under this sector for FY 2026-27. To promote diversification of livestock-based livelihoods and cater to emerging market opportunities, unit costs for Quail Bird Farming and Heifer Rearing have been introduced in the Animal Husbandry sector for FY 2026-27. While quail farming offers a low-investment, quick-return enterprise suitable for small and marginal farmers, heifer rearing supports scientific dairy development by improving the availability of quality milch animals and strengthening the dairy value chain.





| Sl. no     | Particulars                          | Unit       | Amount (₹)                                                     |               | Repayment                                            |
|------------|--------------------------------------|------------|----------------------------------------------------------------|---------------|------------------------------------------------------|
| <b>1</b>   | <b>Dairy</b>                         |            |                                                                |               |                                                      |
| <b>i</b>   | <b>Cross Bred Cows (CBC)</b>         | <b>1+1</b> | Cost of 2 CBCs (₹95000/animal)                                 | 190000        | <b>5 Years</b><br>(monthly / quarterly instalments)  |
|            |                                      |            | Transport Cost(₹4000/animal)                                   | 8000          |                                                      |
|            |                                      |            | Equipment                                                      | 5000          |                                                      |
|            |                                      |            | Feed Cost for 1 month (I animal)                               | 4000          |                                                      |
|            |                                      |            | Insurance (@4.5%)                                              | 8550          |                                                      |
|            |                                      |            | Veterinary aid (₹3500/animal)                                  | 7000          |                                                      |
|            |                                      |            | <b>Total</b>                                                   | <b>222550</b> |                                                      |
| <b>ii</b>  | <b>Graded Murrah Buffaloes (GMB)</b> | <b>1+1</b> | Cost of 2 GMBs (₹110000/animal)                                | 220000        | <b>5-6 Years</b><br>(monthly / quarterly instalment) |
|            |                                      |            | Transport Cost(₹4000/animal)                                   | 8000          |                                                      |
|            |                                      |            | Equipment                                                      | 5000          |                                                      |
|            |                                      |            | Feed Cost for 1 month (I animal) ₹3500/-                       | 3500          |                                                      |
|            |                                      |            | Insurance (@4.5%)                                              | 9900          |                                                      |
|            |                                      |            | Veterinary aid (₹3500x 2)                                      | 7000          |                                                      |
|            |                                      |            | <b>Total</b>                                                   | <b>253400</b> |                                                      |
| <b>iii</b> | <b>Mini Dairy (CB cow)</b>           | <b>3+2</b> | Shed (5 animals, 40 sq.ft/animal ₹200/sq.ft: AC sheet roofing) | 40000         | <b>5-6 Years</b><br>(monthly / quarterly instalment) |
|            |                                      |            | Shed (3 calves, 30 sq.ft/animal ₹200/sq.ft: AC sheet roofing)  | 18000         |                                                      |
|            |                                      |            | Transportation cost (₹4000/animal)                             | 20000         |                                                      |
|            |                                      |            | Cost of equipment (₹3500/animal)                               | 17500         |                                                      |
|            |                                      |            | Cost of animals (₹95000/animal)                                | 475000        |                                                      |
|            |                                      |            | Feed for 1 month for I batch                                   | 20000         |                                                      |
|            |                                      |            | Fodder cultivation (0.5 acre)                                  | 15000         |                                                      |
|            |                                      |            | Insurance (@4.5%)                                              | 21375         |                                                      |
|            |                                      |            | Veterinary aid (₹4500/animal) for I batch                      | 22500         |                                                      |
|            |                                      |            | <b>Total (rounded off)</b>                                     | <b>649400</b> |                                                      |
| <b>iv</b>  | <b>Mini Dairy (GMB)</b>              | <b>3+2</b> | Shed (5 animals, 40 sq.ft/animal ₹200/sq.ft: AC sheet roofing) | 40000         | <b>5-6 Years</b><br>(monthly / quarterly instalment) |
|            |                                      |            | Shed (3 calves, 30 sq.ft/animal ₹200/sq.ft: AC sheet roofing)  | 18000         |                                                      |
|            |                                      |            | Transportation cost (₹4000/animal)                             | 20000         |                                                      |
|            |                                      |            | Cost of equipment (₹3500/animal)                               | 17500         |                                                      |
|            |                                      |            | Cost of animals (₹110000/animal)                               | 550000        |                                                      |
|            |                                      |            | Feed for 1 month for I batch                                   | 13500         |                                                      |
|            |                                      |            | <b>(₹4500/- x 3)</b>                                           |               |                                                      |



| Sl. no | Particulars          | Unit | Amount (₹)                                                                                                                 |                | Repayment                                  |
|--------|----------------------|------|----------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------|
|        |                      |      | Fodder cultivation (0.5 acre)                                                                                              | 15000          |                                            |
|        |                      |      | Insurance (@4.5%)                                                                                                          | 24750          |                                            |
|        |                      |      | Veterinary aid (₹3500/animal) for I batch                                                                                  | 17500          |                                            |
|        |                      |      | <b>Total (rounded off)</b>                                                                                                 | <b>716300</b>  |                                            |
| v      | Mini Dairy (CB cow)  | 5+5  | Shed (10 animals, 40 sq.ft/animal ₹200/sq.ft: AC sheet roofing)                                                            | 80000          | 5-6 Years (monthly / quarterly instalment) |
|        |                      |      | Shed (5 calves, 30 sq.ft/animal ₹200/sq.ft: AC sheet roofing)                                                              | 30000          |                                            |
|        |                      |      | Transportation cost (₹3500/animal)                                                                                         | 35000          |                                            |
|        |                      |      | Cost of equipment (₹3000/animal)                                                                                           | 30000          |                                            |
|        |                      |      | Cost of animals (₹95000/animal)                                                                                            | 950000         |                                            |
|        |                      |      | Feed for 1 month for I batch (₹4500/- x 5)                                                                                 | 22500          |                                            |
|        |                      |      | Fodder cultivation (0.5 acre)                                                                                              | 15000          |                                            |
|        |                      |      | Insurance (@4.5%)                                                                                                          | 42750          |                                            |
|        |                      |      | Veterinary aid (₹3500/animal) for I batch                                                                                  | 35000          |                                            |
|        |                      |      | <b>Total (rounded off)</b>                                                                                                 | <b>1240300</b> |                                            |
|        |                      |      | <b>Note:</b> Additional cost for water source, chaff cutter, milking machine etc., can be considered subject to viability. |                |                                            |
| vi     | Mini Dairy (GMB cow) | 5+5  | Shed (10animals, 40 sq.ft/animal ₹200/sq.ft: AC sheet roofing)                                                             | 80000          | 5-6 Years (monthly / quarterly instalment) |
|        |                      |      | Shed (5 calves, 30 sq.ft/animal ₹200sq.ft: AC sheet roofing)                                                               | 30000          |                                            |
|        |                      |      | Transportation cost (₹3500/animal)                                                                                         | 35000          |                                            |
|        |                      |      | Cost of equipment (₹3000/animal)                                                                                           | 30000          |                                            |
|        |                      |      | Cost of animals (₹110000/animal)                                                                                           | 1100000        |                                            |
|        |                      |      | Feed for 1 month for I batch (₹4500/- x 5)                                                                                 | 22500          |                                            |
|        |                      |      | Fodder cultivation (0.5 acre)                                                                                              | 15000          |                                            |
|        |                      |      | Insurance (@4.5%)                                                                                                          | 49500          |                                            |
|        |                      |      | Veterinary aid (₹4000/animal) for I batch                                                                                  | 20000          |                                            |
|        |                      |      | <b>Total</b>                                                                                                               | <b>1382000</b> |                                            |
|        |                      |      | <b>Note:</b> Additional cost for water source, chaff cutter, milking machine etc., can be considered subject to viability. |                |                                            |

| Sl. no | Particulars                                                 | Unit     | Amount (₹)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |               | Repayment                                                                     |
|--------|-------------------------------------------------------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------------------------------------------------------------------|
| vii    | Commercial Dairy                                            | Any Size | <p>Depending upon the size of the unit. Indicative costs for various items of investments are -</p> <p>a) Cost of CBC - ₹7500-8000/Lpd; cost of GMB - ₹9000-11000/Lpd; Cost of equipment - ₹1100/animal</p> <p>b) Higher transport can be considered on need basis.</p> <p>c) Shed space - 30 sq.ft/calf; 40 sq.ft/ adult; Shed cost - ₹200/sq.ft-Asbestos roof</p> <p>d) Fodder cultivation - 1 ac/10 animals; ₹32300/acre</p> <p>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.</p> <p>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.</p> |               |                                                                               |
| viii   | Female Calf Rearing (CB Calf)                               | 1 no.    | Cost of Feed for 23 months (1620kg) for CB calves                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 46000         | 5 years including 2 years grace period                                        |
|        |                                                             |          | Veterinary Aid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 2000          |                                                                               |
|        |                                                             |          | Insurance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 3000          |                                                                               |
|        |                                                             |          | <b>Total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>51000</b>  |                                                                               |
| xi     | Female Calf Rearing (GMB Calf)                              | 1 no.    | Cost of Feed for 40 months (2200 kg) for Buffalo calves                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 57000         | 5 years including 2 years grace period                                        |
|        |                                                             |          | Veterinary Aid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 2000          |                                                                               |
|        |                                                             |          | Insurance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 3000          |                                                                               |
|        |                                                             |          | <b>Total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>62000</b>  |                                                                               |
| xii    | Rearing of 1st trimester Pregnant Cross bred cattle Heifers | 5 nos.   | Cost of 5 CB/ improved pregnant heifers @ ₹80000/- each animal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 400000        | 5 years including 2 years grace period subject to the availability of subsidy |
|        |                                                             |          | Insurance, transport, tagging and miscellaneous @ ₹7000/ animal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 35000         |                                                                               |
|        |                                                             |          | Cattle feed for pregnant heifers and other feed requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 20000         |                                                                               |
|        |                                                             |          | <b>Total Capital Cost</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <b>455000</b> |                                                                               |
|        |                                                             |          | Concentrate feed / pregnancy ration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 54000         |                                                                               |

| Sl. no | Particulars                                               | Unit   | Amount (₹)                                                           |               | Repayment                                                                                      |
|--------|-----------------------------------------------------------|--------|----------------------------------------------------------------------|---------------|------------------------------------------------------------------------------------------------|
|        |                                                           |        | Dry fodder                                                           | 24000         | from State Govt.                                                                               |
|        |                                                           |        | Green fodder purchase / feeding support                              | 30000         |                                                                                                |
|        |                                                           |        | Mineral mixture and salt                                             | 6000          |                                                                                                |
|        |                                                           |        | Vaccination, deworming, veterinary aid and calving care              | 10000         |                                                                                                |
|        |                                                           |        | Labour / own supervision cost                                        | 24000         |                                                                                                |
|        |                                                           |        | Electricity, water and miscellaneous                                 | 10000         |                                                                                                |
|        |                                                           |        | Calf care after calving                                              | 8000          |                                                                                                |
|        |                                                           |        | <b>Total Recurring Cost</b>                                          | <b>166000</b> |                                                                                                |
|        |                                                           |        | <b>Total</b>                                                         | <b>621000</b> |                                                                                                |
| xii    | Rearing of 1 <sup>st</sup> trimester Pregnant GMB Heifers | 5 nos. | Purchase of 5 pregnant GM buffalo heifers @ ₹90000 each              | 450000        | 5 years including 2 years grace period subject to the availability of subsidy from State Govt. |
|        |                                                           |        | Cattle feed for pregnant buffalo heifers and other feed requirements | 25000         |                                                                                                |
|        |                                                           |        | Insurance, transport, tagging and miscellaneous                      | 40000         |                                                                                                |
|        |                                                           |        | <b>Total Capital Cost / Initial Investment</b>                       | <b>515000</b> |                                                                                                |
|        |                                                           |        | Concentrate feed / pregnancy ration                                  | 95000         |                                                                                                |
|        |                                                           |        | Dry fodder                                                           | 33000         |                                                                                                |
|        |                                                           |        | Green fodder purchase / feeding support                              | 42000         |                                                                                                |
|        |                                                           |        | Mineral mixture and salt                                             | 8000          |                                                                                                |
|        |                                                           |        | Vaccination, deworming, veterinary aid and calving care              | 12000         |                                                                                                |
|        |                                                           |        | Labour / own supervision cost                                        | 30000         |                                                                                                |
|        |                                                           |        | Electricity, water and miscellaneous                                 | 12000         |                                                                                                |
|        |                                                           |        | Calf care after calving                                              | 10000         |                                                                                                |
|        |                                                           |        | <b>Total Recurring Cost up to Calving</b>                            | <b>242000</b> |                                                                                                |
|        |                                                           |        | <b>Project Cost</b>                                                  | <b>757000</b> |                                                                                                |
| xii    | Fodder Cultivation                                        | 1 acre | Cost of land preparation - Ploughing                                 | 3500          | 5 years                                                                                        |
|        |                                                           |        | Forming ridges                                                       | 2000          |                                                                                                |
|        |                                                           |        | Planting Material and seeds                                          | 4000          |                                                                                                |
|        |                                                           |        | Farmyard Manure (FYM) 5 tonnes                                       | 3500          |                                                                                                |
|        |                                                           |        | Fertilizer                                                           | 3500          |                                                                                                |



| Sl. no | Particulars                   | Unit      | Amount (₹)                                                                                       |               | Repayment                             |
|--------|-------------------------------|-----------|--------------------------------------------------------------------------------------------------|---------------|---------------------------------------|
|        |                               |           | Cost of application of FYM and Fertilizer                                                        | 2000          |                                       |
|        |                               |           | Cost of Planting (12 man days /acre: ₹100/ day)                                                  | 1800          |                                       |
|        |                               |           | Cost of weeding                                                                                  | 3500          |                                       |
|        |                               |           | Cost of irrigation                                                                               | 2500          |                                       |
|        |                               |           | Cost of Cutting                                                                                  | 3000          |                                       |
|        |                               |           | Miscellaneous                                                                                    | 3000          |                                       |
|        |                               |           | <b>Total</b>                                                                                     | <b>32300</b>  |                                       |
|        |                               |           | * 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                                                                                      | 15000         | 6 years including 1 year grace period |
|        |                               |           | Cost of Ewes (₹10000/animal)                                                                     | 200000        |                                       |
|        |                               |           | Cost of feeding for one cycle                                                                    | 12000         |                                       |
|        |                               |           | Cost of Insurance (7.5% of 3 years)                                                              | 16125         |                                       |
|        |                               |           | Cost of Veterinary Aid                                                                           | 4000          |                                       |
|        |                               |           | <b>Total (rounded off)</b>                                                                       | <b>247000</b> |                                       |
| ii     | Breeding unit - Nellore breed | 10+1      | Cost of Ram                                                                                      | 15000         | 6 years including 1 year grace period |
|        |                               |           | Cost of Ewes (₹10000/animal)                                                                     | 100000        |                                       |
|        |                               |           | Cost of feeding for one cycle                                                                    | 6000          |                                       |
|        |                               |           | Cost of Insurance (7.5% of 3 years)                                                              | 8625          |                                       |
|        |                               |           | Cost of Veterinary Aid                                                                           | 2000          |                                       |
|        |                               |           | <b>Total (rounded off)</b>                                                                       | <b>132000</b> |                                       |
| iii    | Breeding unit - Deccani breed | 20+1      | Cost of Ram                                                                                      | 15000         | 6 years including 1 year grace period |
|        |                               |           | Cost of Ewes (₹10000/animal)                                                                     | 200000        |                                       |
|        |                               |           | Cost of feeding for one cycle                                                                    | 8000          |                                       |
|        |                               |           | Cost of Insurance (7.5% of 3 years)                                                              | 15000         |                                       |
|        |                               |           | Cost of Veterinary Aid                                                                           | 2000          |                                       |
|        |                               |           | <b>Total</b>                                                                                     | <b>240000</b> |                                       |
| iv     | Ram Lamb Fattening            | 20/ batch | Cost of Lambs (20 Nos)                                                                           | 100000        | 6 years including 1 year grace period |
|        |                               |           | Cost of Feeding                                                                                  | 12000         |                                       |
|        |                               |           | Cost of Veterinary Aid                                                                           | 5000          |                                       |
|        |                               |           | <b>Total</b>                                                                                     | <b>117000</b> |                                       |
| 3      | Goat Rearing                  |           |                                                                                                  |               |                                       |
| i      | Rearing                       | 20+1      | Cost of Buck                                                                                     | 15000         | 6 years including 1                   |
|        |                               |           | Cost of Doe (₹10000/animal)                                                                      | 200000        |                                       |

| Sl. no              | Particulars                                   | Unit | Amount (₹)                                                                              |        | Repayment                             |
|---------------------|-----------------------------------------------|------|-----------------------------------------------------------------------------------------|--------|---------------------------------------|
|                     | Unit - Osmanbadi breed/ Improved desi         |      | Cost of feeding for one cycle                                                           | 12000  | year grace period                     |
|                     |                                               |      | Cost of Insurance (7.5% of 3 years)                                                     | 15000  |                                       |
|                     |                                               |      | Cost of Veterinary Aid                                                                  | 3500   |                                       |
|                     |                                               |      | Cost of Equipment                                                                       | 3000   |                                       |
|                     |                                               |      | Total (rounded off)                                                                     | 250000 |                                       |
| ii                  | Rearing Unit - Osmanbadi breed/ Improved desi | 10+1 | Cost of Buck                                                                            | 15000  | 6 years including 1 year grace period |
|                     |                                               |      | Cost of Doe (₹10000/animal)                                                             | 100000 |                                       |
|                     |                                               |      | Cost of feeding for one cycle                                                           | 6000   |                                       |
|                     |                                               |      | Cost of Insurance (7.5% of 3 years)                                                     | 8625   |                                       |
|                     |                                               |      | Cost of Veterinary Aid                                                                  | 2500   |                                       |
|                     |                                               |      | Cost of Equipment                                                                       | 3000   |                                       |
|                     |                                               |      | Total (rounded off)                                                                     | 135200 |                                       |
| 4                   | Piggery                                       |      |                                                                                         |        |                                       |
| i                   | Breeding unit                                 | 3+1  | Cost of Boar                                                                            | 8000   | 5 years including 1 year grace period |
|                     |                                               |      | Cost of Sows (₹4500 Each)                                                               | 13500  |                                       |
|                     |                                               |      | Cost of shed (70Sq.ft /boar; 20 Sq. ft /sow and farrowing pen 100 Sq. ft)               | 46000  |                                       |
|                     |                                               |      | Cost of Fattener shed (10 Sq. ft/ fattener)                                             | 6000   |                                       |
|                     |                                               |      | Cost of Feeding adults and growers                                                      | 50000  |                                       |
|                     |                                               |      | cost of Insurance (6%)                                                                  | 1290   |                                       |
|                     |                                               |      | Cost of Veterinary Aid                                                                  | 10000  |                                       |
|                     |                                               |      | Tricycle for Kitchen waste collection, water supply and equipment                       | 35000  |                                       |
| Total (rounded off) | 170000                                        |      |                                                                                         |        |                                       |
| ii                  | Breeding unit                                 | 10+1 | Cost of Boar                                                                            | 8000   | 5 years including 1 year grace period |
|                     |                                               |      | Cost of Sows (₹4500 Each)                                                               | 45000  |                                       |
|                     |                                               |      | Cost of shed (70Sq.ft /boar; 20 Sq. ft /sow and farrowing pen 100 Sq. ft @ ₹200/Sq.ft.) | 74000  |                                       |
|                     |                                               |      | Cost of Fattener shed (10 Sq. ft/ fattener)                                             | 46200  |                                       |
|                     |                                               |      | Cost of Feeding adults and growers                                                      | 9000   |                                       |
|                     |                                               |      | Cost of Insurance (6%)                                                                  | 3180   |                                       |
|                     |                                               |      | Cost of Veterinary Aid                                                                  | 67000  |                                       |
|                     |                                               |      | Tricycle for Kitchen waste collection, water supply and equipment                       | 190000 |                                       |

| Sl. no   | Particulars                      | Unit                                 | Amount (₹)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |               | Repayment                             |
|----------|----------------------------------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------------------|
|          |                                  |                                      | Labor charges                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 120000        |                                       |
|          |                                  |                                      | <b>Total</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>562380</b> |                                       |
|          |                                  |                                      | <b>Total cost (rounded off)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>562400</b> |                                       |
| iii      | <b>Fattener unit</b>             | 10                                   | Cost of piglets                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 35000         | 5 years including 1 year grace period |
|          |                                  |                                      | Cost of shed (12.50 Sq. ft/piglet)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 25000         |                                       |
|          |                                  |                                      | Cost of feed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 7500          |                                       |
|          |                                  |                                      | Miscellaneous                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 2000          |                                       |
|          |                                  |                                      | <b>Total cost (rounded off)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>70000</b>  |                                       |
| <b>5</b> | <b>Poultry</b>                   |                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |               |                                       |
| i        | <b>Contract Broiler farming</b>  | Any Size                             | Only cost of shed and equipment need to be considered.<br>Indicative cost would be: Thatched roof shed ₹ 120 /sq.ft / shed with asbestos roof and local material – ₹ 200-220/sq. and Equipment (₹ 25/broiler)                                                                                                                                                                                                                                                                                                                          |               | 6-8 years                             |
| ii       | <b>Independent broiler units</b> | Large units                          | Cost of Shed Construction - Asbestos – ₹ 200-220/sq. ft,; thatched roof - ₹ 120/sq. ft,<br>Equipment - ₹ 25/broiler.<br>Cost of DOC - ₹ 40-45<br>Cost of Feed - ₹ 40-42/kg<br>Cost of Misc. Expenses - ₹ 20/bird (₹ 430-450/bird)<br>Feed Consumption – 3 to 4 kg based on age of marketing                                                                                                                                                                                                                                            |               | 05 Years                              |
| iii      | <b>Layer farming</b>             | Any Size Preferably over 50000 birds | <b>Depends upon the size -</b><br>Cost of Shed Construction - Raised Platform with asbestos sheet - ₹270-300/sq.ft.<br>Cost of Equipment - (dep. upon quotation) –<br>Cage system - ₹ 80/brooder & grower; ₹ 100/layer<br>Cost of DOC – ₹ 40-45.<br>Cost of Feed - ₹ 35-38 (brooder)/ ₹ 32-35 (grower mash)/₹ 25-27 (layer mash) per kg.<br>Cost of Misc expenses - ₹ 20 upto point of lay; ₹ 20 during lay<br>(₹ 650-680/bird)<br><br><b>Feed Consumption</b><br>1 – 8 Week 2 kg<br>9- 20 Weeks 6 kg<br>After 21 Weeks 700 grams/week |               | 8 years with one year grace period    |
| iv       | <b>Back Yard Birds Unit</b>      | 50 Birds                             | Cost of Construction – Asbestos (₹230/-sq. ft@2 Sq.ft per bird                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 23000         |                                       |
|          |                                  |                                      | Equipment for 50 birds @ ₹25/bird                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1250          |                                       |



| Sl. no                                                               | Particulars                                         | Unit                        | Amount (₹)                                                                                                                 |               | Repayment                               |
|----------------------------------------------------------------------|-----------------------------------------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------|
|                                                                      |                                                     |                             | Cost of chicks 50 @ ₹30/chick                                                                                              | 1500          |                                         |
|                                                                      |                                                     |                             | Cost of concentrate feed @ 7kg for 20 weeks @ ₹ 35/kg                                                                      | 12250         |                                         |
|                                                                      |                                                     |                             | Misc. expenditure (electricity, vaccine medicine, insurance etc. Including veterinary aid @ ₹30/bird/batch and contingency | 1500          |                                         |
|                                                                      |                                                     |                             | <b>Total</b>                                                                                                               | <b>39500</b>  |                                         |
| v                                                                    | Quail birds -Meat/ table purpose                    | 400 birds (8 batches /year) | Low-cost shed / partition / roofing                                                                                        | 35,000        | 5 years including 1 year grace period   |
|                                                                      |                                                     |                             | Cages / brooder arrangement                                                                                                | 15,000        |                                         |
|                                                                      |                                                     |                             | Feeders, drinkers and trays                                                                                                | 5,000         |                                         |
|                                                                      |                                                     |                             | Electrical fittings and brooder lamps                                                                                      | 4,000         |                                         |
|                                                                      |                                                     |                             | Water arrangement and miscellaneous items                                                                                  | 3,000         |                                         |
|                                                                      |                                                     |                             | Contingency                                                                                                                | 3,000         |                                         |
|                                                                      |                                                     |                             | Day-old quail chicks 400 birds @ ₹ 10/bird                                                                                 | 4000          |                                         |
|                                                                      |                                                     |                             | Feed one batch @ ₹ 220 Kg/ batch @ ₹40 / kg                                                                                | 8800          |                                         |
|                                                                      |                                                     |                             | Litter / bedding / cleaning (Lump sum)                                                                                     | 700           |                                         |
|                                                                      |                                                     |                             | Medicines, supplements and disinfectants (Lump sum)                                                                        | 600           |                                         |
|                                                                      |                                                     |                             | Electricity, brooding and water (Lump sum)                                                                                 | 700           |                                         |
|                                                                      |                                                     |                             | Transport and marketing (Lump sum)                                                                                         | 800           |                                         |
|                                                                      |                                                     |                             | Miscellaneous expenses (Lump sum)                                                                                          | 400           |                                         |
|                                                                      |                                                     |                             | <b>Total</b>                                                                                                               | <b>81,000</b> |                                         |
| <b>6 Plough Bullocks and Bullock Carts</b>                           |                                                     |                             |                                                                                                                            |               |                                         |
| i                                                                    | Plough Bullocks                                     | 1 pair                      | A. non-descript (medium size): ₹ 60000<br>B. Hallikar Bullocks: ₹ 90000 (including insurance)                              |               | 5 years                                 |
| ii                                                                   | Bullock Carts                                       | 1 no.                       | A. Pneumatic Tyre carts (3 T): ₹60000<br>B. Carts of local make / wooden: ₹50000                                           |               | 5 years                                 |
| *Demand is mainly in sugarcane areas for transport of cane to mills. |                                                     |                             |                                                                                                                            |               |                                         |
| <b>7 Swachh Meat Hub</b>                                             |                                                     |                             |                                                                                                                            |               |                                         |
| i                                                                    | Portable hygienic slaughter unit with composting of | 01                          | Swachh Meat Hub portable slaughter unit                                                                                    | 750000        | 3 years including 6 months grace period |
|                                                                      |                                                     |                             | Knife sterilizer                                                                                                           | 5000          |                                         |
|                                                                      |                                                     |                             | Knife sharpener                                                                                                            | 5000          |                                         |
|                                                                      |                                                     |                             | Weighing balance                                                                                                           | 5000          |                                         |

| Sl. no | Particulars                                       | Unit | Amount (₹)                                            |               | Repayment |
|--------|---------------------------------------------------|------|-------------------------------------------------------|---------------|-----------|
|        | <b>solid and liquid waste for small ruminants</b> |      | 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        |           |
|        |                                                   |      | <b>Total cost (rounded off)</b>                       | <b>970000</b> |           |
|        |                                                   |      |                                                       |               |           |

### 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 must 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.

### Heifers

- Rearing of 1st Trimester Pregnant Graded Murrah Buffalo Heifers & Rearing of 1st Trimester Pregnant Cross Bred Cattle Heifers, the units may be financed only if subsidy from the State Govt. is available.

### 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, Enterotoxaemia etc.,) with the help of local vet.
- The bank may provide Aadhar number to Animal Husbandry department to ascertain coverage under 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 & vet 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.

### Quail Birds

- Beneficiary must ensure proper tie up arrangements for marketing before undertaking the activity.
- Proper training to be provided to farmers before uptake of the activity
- Good quality day old chicks may be purchased from reputed hatcheries/ Govt. Colleges.
- Beneficiary may follow the schedule for vaccination and deworming under the guidance of Veterinary Doctor.

### Swachh Meat Hub

- The Swachh Meat Hub – A portable hygienic slaughter unit with composting of solid and liquid waste for small ruminants is 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.





## Chapter 8

# Fisheries

Fisheries is one of the fast-growing sectors that generate income and employment in Telangana. Telangana's fisheries sector ranks 5th 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 fishing 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 income through value added products. The Government is also actively implementing the Integrated Fisheries Development Scheme to boost the fisheries sector. In recognition of its efforts, Telangana was honored with the "Best Performing Inland State in Fisheries Sector" award by the Government of India and NFDB. Accordingly, NABARD has finalised the unit costs for activities under this sector for FY 2026-27.





| Sl. no   | Activity                                                                       | Capital Cost (₹) | Recurring Activity                          | Recurring Cost (₹) | Total cost (₹) |
|----------|--------------------------------------------------------------------------------|------------------|---------------------------------------------|--------------------|----------------|
| <b>1</b> | <b>Fish Seed Rearing unit 1 ha.</b>                                            |                  |                                             |                    |                |
|          | Ground cleaning, dewatering, 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            | Micronutrients                              | 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               |                |
|          |                                                                                |                  | Unskilled Labour                            | 6000               |                |
|          | Water testing kit 20000                                                        | 20000            | Harvesting and packing expenses             | 6000               |                |
|          | Electrification L.S.                                                           | 50000            | Medicine                                    | 2000               |                |
|          | Watchman shed - 100 sqft                                                       | 50000            | Power Charges                               | 10000              |                |
|          | <b>Total cost (rounded off)</b>                                                | <b>750000</b>    |                                             | <b>150000</b>      | <b>900000</b>  |
| <b>2</b> | <b>Marketing support to Fishers</b>                                            |                  |                                             |                    |                |
|          |                                                                                |                  | Purchase of fish local @ 30 Kgs per day     | 21000              |                |
|          |                                                                                |                  | Purchase of ice                             | 3150               |                |
|          |                                                                                |                  | Transportation and other incidental charges | 850                |                |
|          | <b>Total cost (rounded off)</b>                                                | <b>NIL</b>       |                                             | <b>25000</b>       | <b>25000</b>   |

|   |                                                                      |         |                                                |        |         |
|---|----------------------------------------------------------------------|---------|------------------------------------------------|--------|---------|
| 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                            | 150000 |         |
|   | 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 |

|   |                                                      |        |                                                            |        |        |
|---|------------------------------------------------------|--------|------------------------------------------------------------|--------|--------|
| 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 | Micronutrients                                             | 25000  |        |
|   | Incubation chambers                                  |        | Lime                                                       | 10000  |        |
|   | Spawn collection cistern                             |        |                                                            |        |        |
|   | Egg collection tank                                  |        |                                                            |        |        |
|   | Shed for store                                       |        | Cost of feed                                               | 75000  |        |
|   | Laboratory room                                      |        |                                                            |        |        |
|   | Overhead tank                                        |        |                                                            |        |        |
|   | Inlet and outlets and water supply                   |        |                                                            |        |        |
|   | Machinery and Equipment                              |        |                                                            |        |        |
|   | 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          |                                                         |               |                |
|           | <b>Total cost (rounded off)</b>                                         | <b>2200000</b> |                                                         | <b>300000</b> | <b>2500000</b> |
| <b>9</b>  | <b>Medium scale ornamental Fish rearing and Aquarium units One unit</b> |                |                                                         |               |                |
|           | 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 labour                                         | 35000         |                |
|           | Water supply system                                                     | 25000          |                                                         |               |                |
|           | Electrification L.S.                                                    | 30000          |                                                         |               |                |
|           | Water treatment equipment                                               | 45000          | Misc. expenditure                                       | 10000         |                |
|           | Aeration/lifesaving system                                              | 15000          |                                                         |               |                |
|           | <b>Total cost (rounded off)</b>                                         | <b>525000</b>  |                                                         | <b>200000</b> | <b>725000</b>  |
| <b>10</b> | <b>Semi Intensive fish culture 1 ha.</b>                                |                |                                                         |               |                |
|           | Ground cleaning, dewatering, Levelling etc.,                            | 25000          |                                                         |               |                |
|           | Earthwork excavation, Construction of bund                              | 300000         | Pond Preparation, lime, zeolites, etc                   | 30000         |                |
|           | Inlet, outlet and sluice structure                                      | 40000          |                                                         |               |                |
|           | Pump house - 100 sqft                                                   | 50000          | Fish (IMC/GIFT) Seed-7000 nos                           | 21000         |                |

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

| 12 Circulatory Aquaculture System (CAS) - 1 tank+ 1 pond          |               |                                                                         |               |               |
|-------------------------------------------------------------------|---------------|-------------------------------------------------------------------------|---------------|---------------|
| <b>Tank</b>                                                       |               |                                                                         |               |               |
| PVC 1500 GSM tanks for Fish Cultivation @ 100 kg (weight of tank) |               | Fish Seed (1000*15)                                                     | 15000         |               |
| Welding and UPVC pipes for fitting- including transport           |               | Feed (45*2.7 MT)                                                        | 126000        |               |
| Blowers (1 quantity) including of transport                       | 265795        | Maintenance                                                             | 5000          |               |
| Aeration tubes for Oxygenation purpose                            |               | Transport                                                               | 5000          |               |
| PVC pipes and fitting for blowers and tanks inlets and outlets    |               |                                                                         |               |               |
| Civil work and Shed (15*18 sq. Feet)                              |               |                                                                         |               |               |
| <b>Pond</b>                                                       |               |                                                                         |               |               |
| Cost for earthen pond 25' x 25' x 6'                              | 15000         |                                                                         |               |               |
| Fencing for biosecurity                                           | 10000         |                                                                         |               |               |
| <b>Total cost (rounded off)</b>                                   | <b>290800</b> |                                                                         | <b>151000</b> | <b>441800</b> |
| 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         |               |
| Aerators 2 HP (6 Nos)                                             | 180000        | Seed (6,00,000 no stocking per ha @ ₹                                   | 210000        |               |



|           |                                         |                |                                                          |                |                |
|-----------|-----------------------------------------|----------------|----------------------------------------------------------|----------------|----------------|
|           |                                         |                | 0.35 per seed)<br>including<br>transportation            |                |                |
|           |                                         |                | Feed (1.3 FCR and ₹<br>95/kg)                            | 1235000        |                |
|           | Pump house/Farm shed (1<br>No)          | 100000         | Fuel & Electricity (₹<br>8 per unit for<br>20000+ units) | 160000         |                |
|           |                                         |                | Watch & ward                                             | 80000          |                |
|           |                                         |                | Lab/Technician<br>charges                                | 50000          |                |
|           | Pipes, wiring etc                       | 40000          | Harvest charges                                          | 30000          |                |
|           |                                         |                | Miscellaneous                                            | 25000          |                |
|           | <b>Total cost (rounded<br/>off)</b>     | <b>1190000</b> |                                                          | <b>2280000</b> | <b>3470000</b> |
| <b>14</b> | <b>Murrel Hatchery</b>                  |                |                                                          |                |                |
|           | Land development and<br>fencing         | 100000         | Broodstock<br>maintenance                                | 100000         |                |
|           | Brooder and nursery tanks<br>(10 units) | 400000         | Feed cost                                                | 100000         |                |
|           | Water supply system &<br>pipelines      | 100000         | Electricity and water                                    | 60000          |                |
|           | Overhead tank + sump<br>construction    | 100000         | Hormones and<br>spawning aids                            | 40000          |                |
|           | Aeration system (blowers,<br>diffusers) | 120000         | Labour (1 full-time +<br>1 part-time)                    | 200000         |                |
|           | Generator (5 KVA)                       | 60000          | Fuel for generator                                       | 30000          |                |
|           | Oxygen cylinders and<br>fittings        | 50000          | Chemicals and<br>disinfection                            | 20000          |                |
|           | Refrigerator and<br>Incubation chamber  | 50000          | Packaging and<br>transport                               | 40000          |                |
|           | Laboratory equipment                    | 70000          | Maintenance and<br>repairs                               | 30000          |                |
|           | Shed/office +<br>electrification        | 100000         |                                                          |                |                |
|           | Miscellaneous and<br>contingency        | 30000          |                                                          |                |                |

|           |                                                                           |                |                                  |               |                |
|-----------|---------------------------------------------------------------------------|----------------|----------------------------------|---------------|----------------|
|           | <b>Total cost (rounded off)</b>                                           | <b>1180000</b> |                                  | <b>155000</b> | <b>1335000</b> |
| <b>15</b> | <b>Fishermen Societies members /Licence Holders (Reservoir Fishermen)</b> |                |                                  |               |                |
|           |                                                                           |                | Cast Nets                        | 5000          |                |
|           |                                                                           |                | Gill Nets                        | 2400          |                |
|           |                                                                           |                | FRP Coracle                      | 20000         |                |
|           |                                                                           |                | Life Jacket                      | 1200          |                |
|           |                                                                           |                | Packaging material including ice | 1400          |                |
|           | <b>Total cost (rounded off)</b>                                           | <b>NIL</b>     |                                  | <b>30000</b>  | <b>30000</b>   |

### 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.

## Chapter 9

# Farm Mechanization

Farm mechanization is a key driver of agricultural transformation, enabling timely farm operations, higher productivity, efficient resource utilization, and reduced drudgery. The adoption of modern machinery and equipment across the agricultural value chain—from land preparation and sowing to harvesting, post-harvest handling, and value addition—has become essential for enhancing farm profitability and addressing labour shortages in rural areas. As per ICAR estimates, mechanization levels in India vary across operations, with about 70% mechanization in seedbed preparation, 40% in sowing and around 34% in harvesting and threshing, resulting in an overall mechanization level of about 45–47% (PIB, 2025; Parliamentary Committee, 2023).

In Telangana, mechanization adoption remains limited due to small landholdings and high cost of machinery. About 41% of farmers incur expenditure on repair and maintenance of agricultural implements, while nearly 83.7% depend on hiring equipment for crop production. Only about 4.4% of farm households own a tractor, 3.8% own power-driven farm machinery and only 2.3% own both a tractor and other equipment (Source: NCAER, January 2023).





Post-harvest losses (PHL) in agricultural commodities remain significant, reflecting inadequate mechanization and weak storage and transportation infrastructure. As per NABCONS study (2022), losses range from 3.9–5.9% for cereals, 5.6–6.7% for pulses, 6–15% for fruits and 4.8–11.6% for vegetables (PIB, 2025).

NABARD supports farm mechanization through provision of Long-Term Refinance to eligible financial institutions against Ground Level Credit (GLC) disbursements for investment in agricultural machinery and infrastructure. NABARD has also been promoting climate-resilient and post-harvest technologies such as solar dryers, which have good potential especially when supported through Farmer Producer Organizations (FPOs).



| Sl.no | Name of the Activity                                    | Unit cost<br>(₹ lakh) | Repayment<br>(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                   |
| 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 - 4 Wheel Drive (WD)                              | 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                   |

| Sl.no | Name of the Activity                                                                                                                                                                            | Unit cost<br>(₹ lakh) | Repayment<br>(Yrs.) |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------|
| 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 |
| 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 |



| Sl.no                             | Name of the Activity                                                                           | Unit cost<br>(₹ lakh) | Repayment<br>(Yrs.) |
|-----------------------------------|------------------------------------------------------------------------------------------------|-----------------------|---------------------|
| 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                   |
| <b>Rotavators</b>                 |                                                                                                |                       |                     |
| 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                   |
| <b>Plant Protection Equipment</b> |                                                                                                |                       |                     |
| 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                   |

| Sl.no                         | Name of the Activity                                                                                                    | Unit cost<br>(₹ lakh) | Repayment<br>(Yrs.) |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------------|
| 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                   |
| <b>Post Harvest Equipment</b> |                                                                                                                         |                       |                     |
| 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                   |
| 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                   |

| Sl.no                                  | Name of the Activity                                                                 | Unit cost<br>(₹ lakh) | Repayment<br>(Yrs.) |
|----------------------------------------|--------------------------------------------------------------------------------------|-----------------------|---------------------|
| 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                   |
| 102                                    | Solar Dryer                                                                          | 2.50                  | 3                   |
| <b>Animal/Bullock Drawn Implements</b> |                                                                                      |                       |                     |
| 103                                    | Animal-drawn 4 row seed cum fertilizer drill (Anantapur type)                        | 0.40                  | 3                   |
| 104                                    | Animal-drawn 4/5 row automatic seed cum fertilizer drill (Adilabad type)             | 0.28                  | 3                   |
| <b>Animal Husbandry Equipment</b>      |                                                                                      |                       |                     |
| 105                                    | Milking machines - 2 bucket                                                          | 0.59                  | 3                   |
| 106                                    | Milking machines - 4 bucket                                                          | 1.35                  | 3                   |
| 107                                    | Solar Milking machines - single bucket - 20 L                                        | 0.35                  | 3                   |
| 108                                    | Feed mixing plants - poultry and cattle feed - 2 TPH                                 | 1.75                  | 3                   |
| 109                                    | Silage Machine - 5 hp - 4.5 MT/hr                                                    | 1.57                  | 3                   |
| <b>Custom Hiring Centres</b>           |                                                                                      |                       |                     |
| <b>1</b>                               | <b>CHC for Cotton (without harvester)</b>                                            |                       |                     |
| a                                      | Tractor - 50 hp                                                                      | 9.80                  | 7-9                 |
| b                                      | Rotavator - 36 blade                                                                 | 1.25                  |                     |
| c                                      | Rotavator - 42 blade                                                                 | 1.35                  |                     |



| Sl.no    | Name of the Activity                    | Unit cost<br>(₹ lakh) | Repayment<br>(Yrs.) |
|----------|-----------------------------------------|-----------------------|---------------------|
| d        | Cotton Shredder                         | 2.50                  |                     |
| e        | Sprayers                                | 0.50                  |                     |
|          | <b>Total cost (rounded off)</b>         | <b>15.40</b>          |                     |
| <b>2</b> | <b>CHC for Maize</b>                    |                       |                     |
| 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                 |                     |
|          | <b>Total cost (rounded off)</b>         | <b>39.93</b>          |                     |
| <b>3</b> | <b>CHC for Groundnut</b>                |                       |                     |
| 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                  |                     |
|          | <b>Total cost (rounded off)</b>         | <b>13.00</b>          |                     |
| <b>4</b> | <b>CHC for Paddy harvesting</b>         |                       |                     |
| a        | Paddy Harvester                         | 31.00                 | 7-9                 |
| b        | Paddy thresher (2 units)                | 3.00                  |                     |
| c        | Baler – Round                           | 3.50                  |                     |
| d        | Baler – Square                          | 5.00                  |                     |
|          | <b>Total cost (rounded off)</b>         | <b>42.50</b>          |                     |
| <b>5</b> | <b>CHC for Pulses/Soybean</b>           |                       |                     |
| 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                  |                     |
|          | <b>Total cost (rounded off)</b>         | <b>16.11</b>          |                     |
| <b>6</b> | <b>CHC for Dry land Crops Package</b>   |                       |                     |
| a        | Tractor - 44 hp                         | 8.25                  | 7-9                 |

| Sl.no | Name of the Activity            | Unit cost<br>(₹ lakh) | Repayment<br>(Yrs.) |
|-------|---------------------------------|-----------------------|---------------------|
| 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                  |                     |
|       | <b>Total cost (rounded off)</b> | <b>16.11</b>          |                     |

### 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.





## Chapter 10

# Food and Agro Processing

Food and Agro Processing play a critical role in reducing post-harvest losses, enhancing value addition, and improving farmers' access to remunerative markets. The sector acts as a vital link between agriculture and industry, generating employment and strengthening rural incomes across the value chain.

Telangana offers significant opportunities for food processing, supported by its diversified agricultural production, strong livestock and poultry sectors, and expanding irrigation infrastructure. The State hosts several food parks, cold-chain and processing infrastructure projects aimed at promoting value-added agriculture. Recognizing the sector's potential for income enhancement, market linkage, and rural industrialization, the Government of Telangana has identified food processing as a thrust area for investment. 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.





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. Accordingly, NABARD has revised the unit costs for Food and Agro-Processing activities for FY 2026-27 to facilitate realistic credit planning and promote value addition in the agricultural sector.

| Sl.no | Name of the Activity                       | Capacity (MT/hr) | Unit cost (₹ lakh) | Repayment (Yrs)                                                                                                |
|-------|--------------------------------------------|------------------|--------------------|----------------------------------------------------------------------------------------------------------------|
| 1     | Rice Processing (Puffed Rice)              | 1 to 1.5         | 96                 | 7 including moratorium period of 6 Quarters<br><br><b>Instalment:</b><br>Quarterly (both principal & Interest) |
| 2     | Chilly Processing (Chili Powder)           | 1 to 1.5         | 100                |                                                                                                                |
| 3     | Turmeric Processing unit (Turmeric Powder) | 1 to 2           | 100                |                                                                                                                |
| 4     | Millet Processing (Minimal Processing)     | 0.2 to 1         | 69                 |                                                                                                                |
| 5     | Oilseed Processing (Cold Pressed Oil Mill) | 0.15 to 0.5      | 39                 |                                                                                                                |
| 6     | Dal mill                                   | 2 to 4           | 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    | 9.00          | 9.00               | 7 including moratorium period of 6 Quarters<br><br><b>Instalment:</b><br>Quarterly (both |
| 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 <sup>3</sup> /h) | 1 | 2.50 | 2.50         | principal & Interest) |
| 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         |                       |
|    | <b>Total</b>                                            |   |      | <b>30.15</b> |                       |
|    | <b>Total cost (including GST)</b>                       |   |      | <b>35.58</b> |                       |

**Chilly Processing (Chilly Powder)**

| Sl.no | Item description                          | Unit | Rate (₹ lakh) | Unit cost (₹ lakh) | Repayment (Yrs)                                             |
|-------|-------------------------------------------|------|---------------|--------------------|-------------------------------------------------------------|
| 1     | Chili Cleaning Machine 100 Kg/hr          | 1    | 1.00          | 1.00               | 7 including moratorium period of 6 Quarters                 |
| 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    | 5.00          | 5.00               |                                                             |
| 5     | Sifting Machine: 100 kg/hr                | 1    | 1.00          | 1.00               |                                                             |
| 6     | Miscellaneous                             | 1    | 1.00          | 1.00               |                                                             |
| 7     | Transformer (160 KVA)                     | 1    | 2.30          | 2.30               | <b>Instalment:</b><br>Quarterly (both principal & Interest) |
| 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               |                                                             |
|       | <b>Total</b>                              |      |               | <b>22.00</b>       |                                                             |
|       | <b>Total cost (including GST)</b>         |      |               | <b>25.96</b>       |                                                             |



**Turmeric Processing unit (Turmeric Powder)**

| Sl. no                            | Item description                 | Unit | Rate (₹ lakh) | Unit cost (₹ lakh) | Repayment (Yrs)                                                                                             |
|-----------------------------------|----------------------------------|------|---------------|--------------------|-------------------------------------------------------------------------------------------------------------|
| 1                                 | Weighing scale 2 HP              | 1    | 0.50          | 0.50               | 7 including moratorium period of 6 Quarters<br><br><b>Instalment:</b> 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               |                                                                                                             |
| <b>Total</b>                      |                                  |      |               | <b>25.90</b>       |                                                                                                             |
| <b>Total cost (including GST)</b> |                                  |      |               | <b>30.56</b>       |                                                                                                             |

**Millets Processing (Minimal Processing)**

| Sl. no                            | Item description                                | Unit | Rate (₹ lakh) | Unit cost (₹ lakh) | Repayment (Yrs)                                                                                             |
|-----------------------------------|-------------------------------------------------|------|---------------|--------------------|-------------------------------------------------------------------------------------------------------------|
| 1                                 | Cleaning cum De-stoner cum Grader -100 kg/hr    | 1    | 1.00          | 1.00               | 7 including moratorium period of 6 Quarters<br><br><b>Instalment:</b> 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               |                                                                                                             |
| <b>Total</b>                      |                                                 |      |               | <b>20.40</b>       |                                                                                                             |
| <b>Total cost (including GST)</b> |                                                 |      |               | <b>24.07</b>       |                                                                                                             |



**Oilseed Processing (Cold Pressed Oil Mill)**

| Sl. no                            | Item description                                 | Unit | Rate (₹ lakh) | Unit cost (₹ lakh) | Repayment (Yrs)                                                                                         |
|-----------------------------------|--------------------------------------------------|------|---------------|--------------------|---------------------------------------------------------------------------------------------------------|
| 1                                 | Destonner-150kg/hr                               | 1    | 2.00          | 2.00               | 7 including moratorium period of 6 Quarters<br><b>Instalment:</b> 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               |                                                                                                         |
| <b>Total</b>                      |                                                  |      |               | <b>16.15</b>       |                                                                                                         |
| <b>Total cost (including GST)</b> |                                                  |      |               | <b>19.06</b>       |                                                                                                         |

**Dal mill**

| Sl. no                            | Item description                                                                                                 | Unit | Rate (₹ lakh) | Unit cost (₹ lakh) | Repayment (Yrs)                                                                                         |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------|------|---------------|--------------------|---------------------------------------------------------------------------------------------------------|
| 1                                 | Precleaner                                                                                                       | 1    | 0.50          | 0.50               | 7 including moratorium period of 6 Quarters<br><b>Instalment:</b> 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 motors, machine accessories, electric control panel, iron & steel platforms | 1    | 2.75          | 2.75               |                                                                                                         |
| <b>Total</b>                      |                                                                                                                  |      |               | <b>24.40</b>       |                                                                                                         |
| <b>Total cost (including GST)</b> |                                                                                                                  |      |               | <b>28.79</b>       |                                                                                                         |

**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.



## Chapter 11

# Renewable Energy

The energy needs of rural areas are still being met out of fossil fuels or forest wood and dung cakes being made from cattle dung. As 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 the International Energy Agency (IEA). As per the IRENA Renewable Energy Statistics 2026, India has moved ahead of Brazil to rank 3rd globally in Renewable Energy Installed Capacity, 3rd in Solar Power capacity and 4th in Wind Power capacity. As on 31 March 2026, India's total non-fossil fuel based installed capacity stands at 283.46 GW (of which 274.68 GW is from renewable sources — 150.26 GW Solar, 56.09 GW Wind, 11.75 GW Bio Energy, 5.17 GW Small Hydro and 51.41 GW Large Hydro), and India achieved the 50% non-fossil capacity milestone in June 2025, five years ahead of its Paris Agreement NDC target. The country continues to work towards 500 GW of non-fossil installed capacity by 2030, in line with Government of India's commitment at COP26.





Telangana has a vast solar potential estimated at 140.45 GW and a wind energy potential of 54.7 GW at 150 m mast height. 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. Under the Telangana Clean and Green Energy Policy 2025, the state is targeting addition of 20,000 MW of renewable energy and storage capacity by 2030, rising to 47.06 GW by FY 2035.

| Sl. no | Item of Investment                                    | Unit Cost (₹) | Repayment (Years) |
|--------|-------------------------------------------------------|---------------|-------------------|
| 1      | Solar Irrigation Pump set - Surface Type – 3 HP       | 205000        | 5                 |
| 2      | Solar Irrigation Pump set - Surface Type – 5 HP       | 297000        | 5                 |
| 3      | Solar Irrigation Pump set - Surface Type – 7.5 HP     | 432000        | 5                 |
| 4      | Solar Irrigation Pump set - Surface Type – 10 HP      | 536000        | 5                 |
| 5      | Solar Irrigation Pump set -Submersible Type –3 HP     | 208000        | 5                 |
| 6      | Solar Irrigation Pump set – Submersible Type – 5 HP   | 299000        | 5                 |
| 7      | Solar Irrigation Pump set - Submersible Type – 7.5 HP | 409000        | 5                 |
| 8      | Solar Irrigation Pump set - Submersible Type – 10 HP  | 514000        | 5                 |
| 9      | <b>Grid Connected Solar Roof top (₹/KWp)</b>          |               | 3-5               |
| a      | 1 KWp                                                 | 79000         |                   |
| b      | 1-2 KWp                                               | 78000         |                   |
| c      | 2-3 KWp                                               | 75000         |                   |
| d      | 3-10 KWp                                              | 70000         |                   |
| e      | 10-100 KWp                                            | 54000         |                   |
| f      | 100-500 KWp                                           | 51000         | 12-15             |
| 10     | Solar Plant in farmers' land, 1 MW                    | 35000000      |                   |
| 11     | Solar powered cold room 5 MT                          | 1350000       | 7-9               |

|    |                                           |            |                |       |       |       |                   |
|----|-------------------------------------------|------------|----------------|-------|-------|-------|-------------------|
| 12 | Solar Fencing (protection from Monkey)    |            |                |       |       |       |                   |
|    | Area                                      | Perimeter  | Battery system | Wires | Other | Total | Repayment (Years) |
|    | a                                         | 1 acre     | 255 meters     | 18000 | 10200 | 15800 | 3-5               |
|    | b                                         | 5 acres    | 569 meters     | 18000 | 18900 | 20300 |                   |
| c  | 10 acres                                  | 805 meters | 18000          | 26200 | 23800 |       |                   |
| 13 | Solar Fencing (protection from Wild Boar) |            |                |       |       |       |                   |
|    | Area                                      | Perimeter  | Battery system | Wires | Other | Total | Repayment (Years) |
|    | a                                         | 1 acre     | 255 meters     | 18000 | 5350  | 11650 | 3-5               |
|    | b                                         | 5 acres    | 569 meters     | 18000 | 8800  | 15100 |                   |
|    | c                                         | 10 acres   | 805 meters     | 18000 | 13400 | 16200 |                   |
|    |                                           |            |                |       |       |       |                   |
|    |                                           |            |                |       |       |       |                   |
|    |                                           |            |                |       |       |       |                   |
|    |                                           |            |                |       |       |       |                   |

### 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.





**Telangana – Details of DDM Offices**

| <b>Name</b>               | <b>District</b>                          | <b>Phone no.</b> | <b>Email</b>                  |
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### Abbreviations

|                          |                                            |
|--------------------------|--------------------------------------------|
| <b>Bcm</b>               | Billion cubic meters                       |
| <b>FY</b>                | Financial Year                             |
| <b>M</b>                 | Meter                                      |
| <b>Bgl</b>               | Below ground level                         |
| <b>Dia</b>               | Diameter                                   |
| <b>RMT</b>               | Running Meter                              |
| <b>Lps</b>               | Litre per second                           |
| <b>m<sup>3</sup></b>     | Cubic meter                                |
| <b>PVC</b>               | Polyvinyl Chloride                         |
| <b>cm</b>                | Centimeter                                 |
| <b>kg/cm<sup>2</sup></b> | kilogram-force per square centimeter       |
| <b>PSI</b>               | Pounds per Square Inch                     |
| <b>Mm</b>                | millimeter                                 |
| <b>OD</b>                | Outer diameter                             |
| <b>GI pipe</b>           | Galvanized Iron pipe                       |
| <b>HDPE pipe</b>         | High-Density Polyethylene pipe             |
| <b>Ha</b>                | Hectare (10000 m <sup>2</sup> )            |
| <b>HP</b>                | Horsepower                                 |
| <b>Kg</b>                | Kilogram                                   |
| <b>GST</b>               | Good & Service Tax                         |
| <b>RWH</b>               | Rainwater Harvesting                       |
| <b>GW</b>                | Ground water                               |
| <b>BIS</b>               | Bureau of Indian Standards                 |
| <b>IS</b>                | Indian Standard                            |
| <b>Sq.m</b>              | Square meter                               |
| <b>NADEP compost</b>     | Narayan Deotao Pandharipande Compost       |
| <b>TPA</b>               | Tonne per annum                            |
| <b>DSR/SOR</b>           | Delhi Schedule of Rates/ Schedule of Rates |
| <b>Sq.ft</b>             | Square feet                                |
| <b>No.</b>               | Number                                     |
| <b>KVK</b>               | Krishi Vigyan Kendra                       |
| <b>Yr/Yrs</b>            | Year/Years                                 |
| <b>Ton</b>               | Metric tonne (1000 kg)                     |
| <b>ft</b>                | feet                                       |
| <b>GSM</b>               | Grams per square meter                     |
| <b>Qtls</b>              | quintal                                    |
| <b>RCC</b>               | Reinforced Cement Concrete                 |
| <b>DFL</b>               | Disease Free Laying                        |

|                    |                                                                 |
|--------------------|-----------------------------------------------------------------|
| <b>GDP</b>         | Gross Domestic Product                                          |
| <b>AC sheet</b>    | Asbestos Cement sheet                                           |
| <b>L</b>           | litre                                                           |
| <b>LPD</b>         | Litre per day                                                   |
| <b>AI</b>          | Artificial Insemination                                         |
| <b>HF</b>          | Holstein Friesian                                               |
| <b>HS, BQ, FMD</b> | Haemorrhagic Septicaemia, Black Quarter, Foot-and-Mouth Disease |
| <b>BMCU</b>        | Bulk Milk Cooler Unit                                           |
| <b>CC limit</b>    | Cash Credit limit                                               |
| <b>NFDB</b>        | National Fisheries Development Board                            |
| <b>WSA</b>         | Water Spread Area                                               |
| <b>TPD</b>         | Tons Per Day                                                    |
| <b>kVA</b>         | Kilovolt-Amperes                                                |
| <b>FCR</b>         | Feed Conversion Ratio                                           |
| <b>ICAR</b>        | Indian Council of Agricultural Research                         |
| <b>NCAER</b>       | National Council of Applied Economic Research                   |
| <b>NABCONS</b>     | NABARD Consultancy Services                                     |
| <b>ISI</b>         | Indian Standards Institution                                    |
| <b>Rpm</b>         | Rotations per minute                                            |
| <b>MT</b>          | Metric tonne                                                    |
| <b>lpd/h/a</b>     | Litre per day/hour/annum                                        |
| <b>TFO</b>         | Total Financial Outlay                                          |
| <b>BOQ</b>         | Bill of Quantity                                                |
| <b>EMI</b>         | Equated Monthly Investments                                     |
| <b>DSCR</b>        | Draft Service Coverage Ratio                                    |
| <b>IRENA</b>       | International Renewable Energy Agency                           |
| <b>GW</b>          | Giga Watt                                                       |
| <b>NDC</b>         | Nationally Determined Contribution                              |
| <b>COP26</b>       | Conference of the Parties                                       |
| <b>MW</b>          | Mega Watt                                                       |
| <b>KWp</b>         | Kilowatt-peak                                                   |

Internal

## FEATURES OF AIF



### Interest Subvention

Cap of ROI  $\leq$  9% & subvention of 3% p.a.  
(NABARD loans for PACS at 1% post subvention)



### Credit Guarantee

Under CGTMSE scheme for loan up to Rs. 2 Crore



### Convergence

Allowed to dovetail with several schemes (across ministries, state govt.)



### Project Eligibility

Upto 25 projects at different locations Rs.2 Cr. per Project

Interest  
Subvention

Credit  
Guarantee

Convergence

Project  
Eligibility

Loan Repayment Period is 7 years (Including moratorium period of upto 2 years)

Internal

## Subsidy Schemes



**MIDH - Mission for Integrated Development of Horticulture**  
35% – 50% capital subsidy



**PM Formalization of Micro Food Processing Enterprises Scheme (PMFME)**  
35% capital subsidy with additional support for FPOs, SHGs and Cooperatives



**PM-KUSUM- Component A, B and C**  
setting up of 2MW solar power plants, stand-alone solar pumping system and solarization of grid connected agriculture pump



**Operation Greens: From TOP to TOTAL**  
50% capital subsidy

**Sub-schemes under PM Kisan Sampada (PMKSY)**  
35% capital subsidy

**Agri-Clinics & Agri-Business Centres (AC&ABC)**  
36-44% subsidy for MANAGE trained Agripreneurs

**Sub Mission on Agriculture Mechanization (SMAM)**  
Up to 40% subsidy for CHCs

\* This list is indicative only.





## **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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