



कृषि और संबद्ध गतिविधियों में निवेश के लिए इकाई लागत 2023-24  
Unit cost for Investment Activities in Agriculture and Allied Sectors  
2023-24

राष्ट्रीय कृषि और ग्रामीण विकास बैंक  
NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT

महाराष्ट्र क्षेत्रीय कार्यालय  
Maharashtra Regional Office

## **विज़न**

“ग्रामीण समृद्धि के लिए राष्ट्रीय विकास बैंक”

## **VISION**

“Development Bank of the Nation for fostering rural prosperity”

## **मिशन**

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

## **MISSION**

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



## प्राक्कथन

कृषि में पूंजी निर्माण कृषि के विकास के लिए एक पूर्वपेक्षा है और बढ़ती मांग को पूरा करने के लिए इस क्षेत्र के संधारणीय विकास हेतु महत्वपूर्ण है. कृषि और संबद्ध गतिविधियों में निवेश से परिसंपत्ति निर्माण होता है जो लंबे समय तक लाभ प्रदान करता है. जहां सार्वजनिक निवेश बड़ी परियोजनाओं तक सीमित है, वहीं किसान के संपूर्ण विकास के लिए निजी निवेश महत्वपूर्ण है.

नाबार्ड कृषि क्षेत्र के अंतर्गत सभी प्रमुख निवेश ऋण गतिविधियों के संबंध में इकाई लागत तय करने के लिए प्रति वर्ष एक राज्य स्तरीय इकाई लागत समिति (एसएलयूसीसी) की बैठक आयोजित करता है ताकि तकनीकी एवं आर्थिक रूप से व्यवहार्य और बैंक ग्राह्य परियोजनाओं के लिए ऋण के पर्याप्त प्रवाह को सुविधाजनक बनाया जा सके.

एसएलयूसीसी द्वारा 30 मई 2023 को आयोजित बैठक में वैज्ञानिक और परामर्श प्रक्रिया के बाद वित्त वर्ष 2023-24 के लिए इकाई लागतें तैयार की गई है. एसएलयूसीसी द्वारा तय की गई इकाई लागतें निर्देशात्मक प्रकृति की होती है और बैंक अपने विवेक से, अपने परिचालन के क्षेत्र में प्रचलित स्थितियों, तकनीकी एवं वित्तीय व्यवहार्यता और परियोजना की बैंक ग्राह्यता के आधार पर संबंधित गतिविधियों के लिए इकाई लागत की गणना कर सकते हैं.

एकीकृत कृषि प्रणाली (आईएफएस), दुधारू पशुओं की स्वदेशी नस्लों और भेड़ पालन के लिए इकाई लागत शुरू की गई है ताकि बैंकों को सक्रिय रूप से इन गतिविधियों को वित्तपोषित करने में सक्षम बनाया जा सके.

मैं इस अवसर पर महाराष्ट्र सरकार के विभिन्न विभागों, वित्तपोषक संस्थानों, महाराष्ट्र राज्य के कृषि विश्वविद्यालयों और नाबार्ड के तकनीकी अधिकारियों तथा अन्य सभी हितधारकों, जिन्होंने इस पुस्तिका को तैयार करने में योगदान दिया है, द्वारा दी गई सहायता और सहयोग हेतु आभार व्यक्त करता हूं. मुझे विश्वास है कि यह पुस्तिका वित्तपोषक संस्थानों, विभिन्न सरकारी विभागों और विकास एजेंसियों के लिए रेडी रेकनर का काम करेगी.

**जी. एस. रावत**

**मुख्य महाप्रबंधक**

**नाबार्ड, महाराष्ट्र क्षेत्रीय कार्यालय, पुणे**

## FOREWORD



Capital formation in agriculture is a pre-requisite for the growth of agriculture and is vital for sustained growth of the sector in order to meet the increasing demands. Investment in agriculture and allied activities leads to asset creation which yield benefits over an extended period. While public investment is limited to larger projects, private investment is crucial for bringing about wholesome development of the farmer.

NABARD convenes a State Level Unit Cost Committee (SLUCC) meeting every year for fixing of unit costs in respect of all the major investment credit activities under Farm Sector, so as to facilitate adequate flow of credit to technically feasible, economically viable and bankable projects.

The unit costs for FY 2023-24 have been prepared following a scientific as well as consultative process by the SLUCC in its meeting held on 30 May 2023. The Unit Costs fixed by the SLUCC are indicative in nature and banks may, at their discretion, arrive at the unit cost for respective activities based on the conditions prevailing in their area of operation, technical feasibility, financial viability and bankability of the project.

Unit cost for Integrated Farming System (IFS), indigenous breeds of Milch animals and Sheep Rearing have been introduced to enable banks to finance the activity proactively.

I take this opportunity to acknowledge the support and cooperation extended by the various Departments of Government of Maharashtra, Financing Institutions, Agriculture Universities of Maharashtra State and technical officers of NABARD and all other stakeholders who have contributed in bringing out this Hand Book. I am sure that the booklet will serve as a ready reckoner to the Financing Institutions, various Government Departments and development agencies.

**G.S. Rawat**

**Chief General Manager**

**NABARD, Maharashtra RO, Pune**

Date of approval of the unit cost: 30 May 2023

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### **Disclaimer**

The unit costs and parameters suggested are based on the information available with NABARD. All Unit costs are indicative in nature and Banks/Govt. agencies may, at their discretion, arrive at the unit costs for respective activities based on the conditions prevailing in their area of operation, technical feasibility, financial viability and bankability of the project. NABARD does not accept any financial liability to anyone using this report for any purpose.

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# 1. Water Resources



## Dug Wells

S.No	Item of Investment	Specifications	Unit Cost for 2023-24 (Rs.)
1	Dug-well in Sandstone and Metamorphic formation in Vidarbha region (applicable to Gadchiroli, Chandrapur, Bhandara districts and part of Nagpur district)	dia 3m, depth 18m, depth of lining 8m	1,90,333.00
2	Dug-cum-borewell in alluvial formation of Tapi & Purna basins in Vidarbha Region Akola, Amravati, Buldhana & Dhule dists.	dia 3m, 20m depth, RCC lining of 0.45m thickness, 20m height Boring-150mm dia, 20m depth	1,61,051.00
3	Dug well in Konkan region (Thane, Raigad, Ratnagiri and Sindhudurg districts)	dia 4.5m, 10m depth of lining 3m	1,45,200.00

<b>S.No</b>	<b>Item of Investment</b>	<b>Specifications</b>	<b>Unit Cost for 2023-24 (Rs.)</b>
4	Dug well in Pune region (Pune, Sangli, Satara, Solapur and Kolhapur districts)	dia 4.5m, 15m depth of lining 4m	1,90,333.00
5	Dug well in Amravati region (Amravati, Akola, Washim, Yavatmal and Buldana districts)	dia 4.5m, 15m depth of lining 4m	1,46,410.00
6	Dug well in Nagpur region (Chandrapur, Nagpur, Gadchiroli, Wardha, Bhandara & Gondia districts)	dia 4.5m, 15m depth of lining 4m	1,46,410.00
7	Dugwell in Aurangabad region (Aurangabad, Beed, Osmanabad, Parbhani, Hingoli, Nanded, Latur & Jalna districts)	dia 6.0m, depth 15m , depth of lining 4m	1,60,710.00
8	Dugwell in Nasik (East) region (Ahmednagar, Nasik, Dhule & Nandurbar districts)	dia 5.0m, depth 15m depth of lining 4m, boring 150mmx15m	1,71,672.00
9	Dug well in Nasik (West) region (Akkalkuwa & Akrani in Nandurbar district, Akole in A'Nagar dist. and Surgana, Peint, Igatpuri & Kalwan in Nasik dist.	dia 5.0m, 10m depth of lining 4m	1,46,410.00

### **Bore Wells**

<b>S.No</b>	<b>Item of Investment</b>	<b>Unit Cost for 2023-24 (Rs.)</b>
10	Bore well in Sandstone & Metamorphic formation in Vidrarbha Region (applicable to Gadchiroli, Gondia, Chandrapur, Bhandara districts & part of Nagpur district, Dhadgaon and Akkalkua tehsils of Nandurbar district and Dharani and Chikaldara of Amravati dictrict) 150 mm dia. Well drilling, PVC casing pipe of 180 mm dia, bore well yield testing, survey charges	43,230.00
11	Tube-cum-borewell in alluvial formation of Tapi & Purna basins in Vidarbha Region Akola, Amravati, Buldhana , Dhule& Jalgaon dists.	2,85,500.00

<b>S.No</b>	<b>Item of Investment</b>	<b>Unit Cost for 2023-24 (Rs.)</b>
12	Bore well in Lateritic formation (generally in Konkan Region i.e., Thane, Raigad, Ratnagiri & Sindhudurg districts Bore well drilling 150 mm dia, MS casing 150 mm dia, bore well yield testing, survey charges	51,244.00
13	Bore well in Deccan Trap formation i.e Pune Region (Pune, Sangli, Satara, Solapur & Kolhapur districts), Nasik (East) Region (Ahmednagar, Nasik, Dhule & Nandurbar districts), Nasik (West) Region (Akkalkuwa & Akrani in Nandurbar district, Akole in A'Nagar district & Surgana, Peint, Igatpur & Kalwan in Nasik dist. Aurangabad Region (Aurangabad, Beed, Osmanabad, Parbhani, Hingoli, Nanded, Latur & Jalna districts), etc 150 mm dia. Well drilling, PVC casing pipe of 180 mm dia, bore well yield testing, survey charges	38,067.00

### **Pumping System**

<b>S.No</b>	<b>Item of Investment</b>	<b>Unit Cost 2023-24 (Rs.)</b>
<b>A</b>	<b>PUMPSETS</b>	
i	Submersible Pump sets	
1	3 HP	44,000.00
2	5 HP	60,500.00
ii	Electric Pump sets with accessories and installation charges	
1	2 HP	15,000
2	3 HP	20,000
3	5 HP	30,000
4	7.5 HP	35,000
iii	Diesel Pump sets with accessories & installation charges	
1	5 HP	35,000.00
2	7.5 HP	40,000.00
iv	Petrol start Kerosene run pump sets with accessories & installation charges	
1	2 HP	15,000.00
2	3.5 HP	20,000.00
<b>B</b>	<b>PUMPHOUSE</b>	
1	Pump house (2.5 mx 2.5 mx 2.1 m)	15,000.00

### Drip Irrigation Systems with Drippers for various Plantation and Horticulture Crops and Floriculture

S.No	Crop	Specifications	Unit Cost for 2023-24 (Rs. Per Ha)
i	Mango/Sapota/Tamarind	10m x 10m	25,000.00
ii	Coconut	8m x 8m	41,000.00
iii	Coconut	7m x 7m	34,000.00
iv	Guava, Lemon, Orange, Mosambi, Cashew	6m x 6m	40,000.00
v	Custard Apple, Pomegranate, Ber, Fig, Drumstick	5m x 5m	36,000.00
vi	Papaya, Arecanut, Tondali, Drumstick	3m x 3m	58,000.00
vii	Grape	3m x 1.5m	60,000.00
viii	Grape	1.80m x 1.20m	1,00,000.00
ix	Banana	2.50m x 2.50m	60,000.00
x	Banana	1.50m x 1.50m	85,000.00
xi	Sugarcane	1.40m x 0.60m x 0.30m	1,00,000.00
	Sugarcane	Sub surface irrigation (per 0.40 ha)	50,000.00
xii	Cotton pair row, Sugarcane	2.30m x 0.75m x 1.50m	60,000.00
xiii	Cotton, Ginger	1m x 1m	1,00,000.00
xiv	Vegetable, Rose	0.75m x 0.75m	1,00,000.00
xv	Strawberry	0.75m x 0.60m x 0.30m	1,00,000.00
xvi	Other Flowers (Tuberose, Gladioli and Chrysanthemum)	0.20m x 0.30 m	1,00,000.00
xvii	Mulberry	1.5m x 0.9m x 0.6 m	60,000.00

### Sprinkler Irrigation System (for field crops like pulses and oilseeds)

S.No	Particulars	Unit Cost for 2023-24 (Rs. Per Ha)
i	63 mm HDPE pipes	25,000.00
ii	75 mm HDPE pipes	30,000.00

## 2. Farm Mechanization



S.No	Activities	Unit Cost for 2023-24 (Rs.)
1	Tractor, Trailer, Reaper, Combined Harvester, other farm implements	As per quotations
2	Conventional carts	
a	Capacity 5 qtl.	16,000.00
b	Capacity 8 qtl.	20,000.00
3	MAIDC tyre carts	
a	Capacity 2 T	26,620.00
b	Capacity 3 T	28,380.00
c	Locally fabricated	21,780.00
4	MAIDC Steel carts	
a	1 MT	36,300.00
b	2 MT	37,400.00
c	3 MT	38,500.00
d	Locally fabricated 3.5 MT	40,700.00

### 3. Plantation & Horticulture



S.No	Crops	Spacing	Unit Cost for 2023-24 (Rs. Per Ha)
1	Mango	10m x 10m	1,57,000.00
	Mango	10m x 10m	1,64,591 (for Konkan Region)
	Mango (HDP)	5m x 5m	2,38,750.00
2	Guava	5m x 5m	1,08,000.00
	Guava (HDP)	2m x 2m	2,76,000.00
3	Grapes		11,64,915.00
4	Pomegranate		2,05,188.00
5	Mandarin orange		1,76,218.00
6	Sweet orange		1,60,705.00
7	Acid lime		1,67,438.00
8	Aonla		78,886.00
9	Sapota		1,28,603.00
10	Custard apple		1,14,300.00
11	Cashew nut		93,829.00
	Cashew nut		96,126.00(for Konkan region)
12	Fig		1,58,470.00
13	Bamboo plantation		30,000.00
	Bamboo plantation		30,000.00(for Konkan region)
14	Drumstick		1,47,627.00
15	Champaca		3,53,250.00
16	Geranium		3,05,000.00
17	Dragon Fruit		9,37,500.00

(Banks in Konkan area may need to consider suitable/need based revision in unit cost wherever necessary)

## Protected Cultivation



### Protected Cultivation of High value Horticulture Crops

S.No	Crops	Area	Unit Cost for 2023-24
1	Gerbera	1000 Sqm	12,31,004.00
2	Cucumber	4000 Sqm	40,09,157.00
3	Tomato	4000 Sqm	40,02,583.00
4	Capsicum	4000 Sqm	40,17,783.00

### Shade net for Flowers and Vegetables

S.No	Activity	Unit Cost for 2023-24
1	10 R Shade net House	3,63,100.00
2	20 R Shade net House	6,27,400.00
3	40 R Shade net House	11,28,600.00

## 4. Land Development



S.No	Item of investment	Specifications	Unit Cost for 2023-24 (Rs.)
1	Graded bunding	0.95 SqM cross section, 210 m length per ha	24,900.00 (with labour) 5,800.00 (with machine)
2	Farm bunding		
i	upto 4% field slope light soil	0.80 SqM c/s 200 m/ha	17,000.00 (with labour) 7,000.00 (with machine)
ii	upto 4% field slope medium soil	1.00 SqM c/s 200 m/ha	21,000.00 (with labour) 8,000.00 (with machine)
iii	upto 4% field slope heavy soil	1.20 SqM c/s 200 m/ha	25,000.00 (with labour) 9000.000 (with machine)
3	Field drainage for wet lands	2.52 SqM c/s 65 m/ha	29,600.00
4	Half dug out community tanks	M3-10000/ha 10	5,56,000.00
i	Half dug out community tanks (m3 10000)	M3-8000/ha 8	4,80,000.00
ii	Half dug out community tanks (m3 10000)	M3-5000/ha 5	3,39,000.00
iii	Half dug out community tanks (m3 10000)	M3-2000/ha 2	1,75,000.00
iv	Half dug out community tanks (m3 10000)	M3-500/ha 0.5	65,500.00
5	Land levelling & shaping/ha	(a) Slope : upto : 1%	7,700.00
		(b) Slope : 1-2%	11,700.00
		(c) Slope : 2-3%	15,500.00
6	Fencing (running mts)	Barbed (1.8 mt.)	145.00

### Sub-surface drainage system for reclamation of saline soils (Per Hectare)

S.No.	Particulars	Unit Cost for 2023-24 (Rs.)
1	Pipe and pipe fittings	62182.00
2	Excavation, pipe laying and road crossings	29,724.00
3	Outlets	8,922.00
4	Pipeline repairs and compensations	3,109.00
	<b>Sub Total-A</b>	<b>1,03,937.00</b>
5	Survey and Supervision charges (10% of A)	10,394.00
	<b>Sub Total-B</b>	<b>1,14,331.00</b>
6	Contingencies (5% of B)	5,717.00
	<b>Total Unit Cost/Ha</b>	<b>1,20,047.00</b>

**Cost rounded off to Rs. 1,20,000/ Ha**

**Cost rounded off to Rs. 48,000/ Acre**

## 5. Fisheries



S.No	Activities	Unit Cost for FY 2023-24 (Rs.)
1	Composite Pond (New)	7,00,000.00
2	Composite pond (Renovation)	4,00,000.00
3	Scampi Monoculture (Pond+Input)	11,00,000.00
4	Scampi Polyculture (Pond+Input)	11,00,000.00
5	Shrimp Farming (Pond+Input)	14,00,000.00
6	Backyard Ornamental Fish Farming	3,00,000.00
7	Medium Ornamental Fish Farming	8,00,000.00
8	Large Ornamental Fish Farming	25,00,000.00

(\*as suggested by Commissioner of Fisheries, GoM for revising unit cost as per the guidelines of PMMSY)

## 6. Animal Husbandry and Poultry



### 1. Unit Cost of 2 Crossbred Holstein Friesian Cows

S.No	Particulars	Unit Cost for 2023-24 (Rs.)
1	Total Financial Outlay/Capital Cost	1,60,340.00
2	Margin (15%)	24,051.00
3	Bank Loan (85%)	1,36,289.00

Particulars	Unit Cost 2023-24 (Rs.)
<b>A. Capital Cost</b>	
Cost of 2 HF Cross bred with Avg milk yield of 12 lit. per day (@ 70,000/- each animal)	1,40,000.00
Equipment cost @ 1000 per animal	2,000.00
<b>Sub Total</b>	<b>1,42,000.00</b>
<b>B. Working Capital</b>	
Concentrate Feeding cost (for one month) 189 kgs @ Rs. 30/kg	11,340.00
Insurance (@ 5% animal cost)	7,000.00
<b>Sub Total</b>	<b>18,340.00</b>
<b>Total Outlay</b>	<b>1,60,340.00</b>
<b>Margin (15%)</b>	<b>24,051.00</b>
<b>Bank Loan (85%)</b>	<b>1,36,289.00</b>

The price of the animal varies according to age, stage of calving, milk yield, percentage of bloodline of purebred and other local factors. The average cost of animal may increase by Rs. 4,000/- to Rs. 5,000/- for every one litre increase in yield. In addition to the above, the transportation charges may also add to the total cost. The animals should be free from TB, JD & Brucellosis. Banks may take the above factors into consideration while financing under dairy sector.

## 2. Unit Cost of 2 Graded Murrah Buffaloes

S.No	Particulars	Unit Cost for 2023-24 (Rs.)
1	Total Financial Outlay/Capital cost	1,80,800.00
2	Margin	27,120.00
3	Bank Loan	1,53,680.00

Particulars	Unit Cost (Rs.)
<b>A. Capital Cost</b>	
Cost of 2 Murrah/Desi upgraded Murrah Buffalo with Avg. milk yield of 8 lit. per day (@ 80,000/- each animal)	1,60,000.00
Equipment cost @ 1000 per animal	2,000.00
<b>Sub Total</b>	<b>1,62,000.00</b>
<b>B. Working Capital</b>	
Concentrate Feeding cost (for one month) 180 Kg @ Rs. 30/kg	10,800.00
Insurance (@ 5% animal cost)	8,000.00
<b>Sub Total</b>	<b>18,800.00</b>
<b>Total Outlay</b>	<b>1,80,800.00</b>
<b>Margin (15%)</b>	<b>27,120.00</b>
<b>Bank Loan (85%)</b>	<b>1,53,680.00</b>

The price of the animal varies according to age, stage of calving, milk yield, percentage of bloodline of purebred and other local factors. The average cost of animal may increase by Rs.7,000/- to Rs.10,000/- for every one litre increase in yield. In addition to the above, the transportation charges may also add to the total cost. The animals should be free from TB, JD & Brucellosis. Banks may take the above factors into consideration while financing under dairy sector.

### 3. Unit Cost of 2 Crossbred Jersey Cows

S.No	Particulars	Unit Cost for 2023-24 (Rs.)
1	Total Financial Outlay	1,49,840.00
2	Margin Money (15%)	22,476.00
3	Bank Loan (85%)	1,27,364.00

Particulars	Unit Cost (Rs.)
<b>A. Capital Cost</b>	
Cost of 2 Jersey Cross bred with Avg milk yield of 12 lit. per day (@ 65,000/- each animal)	1,30,000.00
Equipment cost @ 1000 per animal	2,000.00
<b>Sub Total</b>	<b>1,32,000.00</b>
<b>B. Working Capital</b>	
Concentrate Feeding cost (for one month) 189 Kg @ Rs. 30/kg	11,340.00
Insurance (@ 5% animal cost)	6,500.00
<b>Sub Total</b>	<b>17,840.00</b>
<b>Total Outlay</b>	<b>1,49,840.00</b>
<b>Margin (15%)</b>	<b>22,476.00</b>
<b>Bank Loan (85%)</b>	<b>1,27,364.00</b>

The price of the animal varies according to age, stage of calving, milk yield, percentage of bloodline of purebred and other local factors. The average cost of animal may increase by Rs. 4,000/- to Rs. 5,000/- for every one litre increase in yield. In addition to the above, the transportation charges may also add to the total cost. The animals should be free from TB, JD & Brucellosis. Banks may take the above factors into consideration while financing under dairy sector.

#### 4. Unit Cost of 2 Desi/Indigenous (Gir) Cows

S.No	Particulars	Unit Cost for 2023-24 (Rs.)
1	Total Financial Outlay	2,00,900.00
2	Margin Money (15%)	30,135.00
3	Bank Loan (85%)	1,70,765.00

Particulars	Unit Cost 2023-24 (Rs.)
<b>A. Capital Cost</b>	
Cost of 2 Desi cow (Gir Breed) with Avg milk yield of 10 lit. per day (@ 90,000/- each animal)	1,80,000.00
Equipment cost @ 1000 per animal	2,000.00
<b>Sub Total</b>	<b>1,82,000.00</b>
<b>B. Working Capital</b>	
Concentrate Feeding cost (for one month)165 kgs @ Rs. 30/kg	9,900.00
Insurance (@ 5% animal cost)	9,000.00
<b>Sub Total</b>	<b>18,900.00</b>
<b>Total Outlay</b>	<b>2,00,900.00</b>
<b>Margin (15%)</b>	<b>30,135.00</b>
<b>Bank Loan (85%)</b>	<b>1,70,765.00</b>

The price of the animal varies according to age, stage of calving, milk yield, percentage of bloodline of purebred and other local factors. Purity of the breed should be certified by the Competent Lab/University/ State/National Agencies like NDDB, MLDB etc. The animals should be free from TB, JD & Brucellosis. The average cost of animal may increase by Rs.5,000/- to Rs.8,000/- for every one litre increase in yield.

In addition to the above, the transportation charges may also add to the total cost. Banks may take the above factors into consideration while financing under dairy sector.

<b>Project Profitability</b>						
<b>Particulars / Years</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
<b>Income (Rs.)</b>						
I. From sale of Milk	216000	216000	216000	229500	229500	229500
II. From sale of Manure	6492	8400	8400	8448	8400	8448
III. Income from Gunny Bags	55	60	60	62	60	62
<b>Total Income</b>	<b>222547</b>	<b>224460</b>	<b>224460</b>	<b>238010</b>	<b>237960</b>	<b>238010</b>
<b>Expenditure (Rs.)</b>						
1. Concentrate Feed	81900	90000	90000	93600	90000	93600
2. Green Fodder	32400	43200	43200	43200	43200	43200
3. Dry Fodder	6750	9000	9000	9000	9000	9000
4. Veterinary Aid	1500	2000	2000	2000	2000	2000
5. Insurance		9000	9000	9000	9000	9000
<b>Total Expenditure</b>	<b>122550</b>	<b>153200</b>	<b>153200</b>	<b>156800</b>	<b>153200</b>	<b>156800</b>
<b>Gross Surplus (Rs.)</b>	<b>99997</b>	<b>71260</b>	<b>71260</b>	<b>81210</b>	<b>84760</b>	<b>81210</b>

<b>Financial Analysis</b>						
<b>Particulars / Years</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
<b>Cost (Rs.)</b>						
Capital cost	1,91,000					
Recurring cost	122550	153200	153200	156800	153200	156800
<b>Total cost</b>	<b>3,13,550</b>	<b>153200</b>	<b>153200</b>	<b>156800</b>	<b>153200</b>	<b>156800</b>
<b>Benefits (Rs.)</b>						
Income	222547	224460	224460	238010	237960	238010
Closing Stock Value						20000
<b>Total benefits</b>	<b>222547</b>	<b>224460</b>	<b>224460</b>	<b>238010.4</b>	<b>237960</b>	<b>258010.4</b>
<b>Net benefits</b>	-91003	71260	71260	81210	84760	101210
Discount Factor	0.869	0.756	0.657	0.571	0.497	0.432
Discounted benefits	193393	169692	147470	135904	118266	111545
Discounted costs	272475	115819	100652	89533	76140	67789
<b>Net Present Value</b>		<b>Rs. 1,53,933.07</b>				
<b>Benefit Cost Ratio (BCR)</b>					<b>1.21</b>	
<b>Internal Rate of Return (IRR) of the Scheme</b>					<b>78.03%</b>	
<b>Average DSCR</b>					<b>1.90</b>	

<b>Bankability</b>						
<b>Year</b>	<b>Loan outstanding</b>	<b>Gross Surplus</b>	<b>Interest @ 12%</b>	<b>Principal Paid</b>	<b>Total Repayment</b>	<b>Net Surplus</b>
I	170765	99997	20492	0	20492	79505
II	170765	71260	20492	34153	54645	16615
III	136612	71260	16393	34153	50546	20714
IV	102459	81210	12295	34153	46448	34762
V	68306	84760	8197	34153	42350	42410
VI	34153	81210	4098	34153	38251	42959
<b>Total</b>		<b>489697</b>	<b>81967</b>	<b>170765</b>	<b>252732</b>	

<b>Techno economic parameters</b>	
Breed of Animal	Desi Breed -Gir
No. of Animals	2
Cost of Animals (Rs.)	90,000
Average Milk Yield (litres/day)	10
Cost of equipment per animal (Rs.)	1000
Insurance premium (% per annum)	5
Insurance per animal (Rs)	4500
Veterinary aid/animal/ year (Rs.)	1000
Cost of concentrate feed (Rs./kg)	30
Concentrate required per animal per day during milking (Kg)	5.5
Concentrate required per animal per day during dry period (Kg)	1.5
Cost of dry fodder (Rs./kg)	5
Dry fodder required per day/animal (Kg)	2.5
Cost of green fodder (Rs./kg)	4
Green fodder required per day/animal (Kg)	15
Margin (%)	60
Rate of interest (%)	12
Repayment period	6 years
Selling price of milk/litre (Rs./ litre)	45
Lactation days	300
Dry days	150
Freshly calved animals in 2 <sup>nd</sup> or 3 <sup>rd</sup> lactation are purchased in two batches at an interval of 4 to 6 months.	
Cost of rearing calves not considered as it will be nullified by their sale value or retention value.	

## 5. Unit Cost of 2 Desi/Indigenous (Tharparkar) Cows

S.No	Particulars	Unit Cost for 2023-24 (Rs.)
1	Total Financial Outlay	1,78,460.00
2	Margin Money (15%)	26,769.00
3	Bank Loan (85%)	1,51,691.00

Particulars	Unit Cost 2023-24 (Rs.)
<b>A. Capital Cost</b>	
Cost of 2 Desi cow (Tharparkar Breed) with Avg milk yield of 8 lit. per day (@ 80,000/- each animal)	1,60,000.00
Equipment cost @ 1000 per animal	2,000.00
<b>Sub Total</b>	<b>1,62,000.00</b>
<b>B. Working Capital</b>	
Concentrate Feeding cost (for one month)141 kgs @ Rs. 30/kg	8,460.00
Insurance (@ 5% animal cost)	8,000.00
<b>Sub Total</b>	<b>16,460.00</b>
<b>Total Outlay</b>	<b>1,78,460.00</b>
<b>Margin (15%)</b>	<b>26,769.00</b>
<b>Bank Loan (85%)</b>	<b>1,51,691.00</b>

The price of the animal varies according to age, stage of calving, milk yield, percentage of bloodline of purebred and other local factors. Purity of the breed should be certified by the Competent Lab/University/ State/National Agencies like NDDB, MLDB etc. The animals should be free from TB, JD & Brucellosis. The average cost of animal may increase by Rs.5,000/- to Rs.8,000/- for every one litre increase in yield.

In addition to the above, the transportation charges may also add to the total cost. Banks may take the above factors into consideration while financing under dairy sector.

<b>Project Profitability</b>						
<b>Particulars / Years</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
<b>Income (Rs.)</b>						
I. From sale of Milk	211200	211200	211200	224400	224400	224400
II. From sale of Manure	6338.4	8246.4	8246.4	8284.8	8246.4	8284.8
III. Income from Gunny Bags	47	52	52	54	52	54
<b>Total Income</b>	<b>217585</b>	<b>219499</b>	<b>219499</b>	<b>232739</b>	<b>232699</b>	<b>232739</b>
<b>Expenditure (Rs.)</b>						
1. Concentrate Feed	70380	78480	78480	81360	78480	81360
2. Green Fodder	32400	43200	43200	43200	43200	43200
3. Dry Fodder	6750	9000	9000	9000	9000	9000
4. Veterinary Aid	1500	2000	2000	2000	2000	2000
5. Insurance		8000	8000	8000	8000	8000
<b>Total Expenditure</b>	<b>111030</b>	<b>140680</b>	<b>140680</b>	<b>143560</b>	<b>140680</b>	<b>143560</b>
<b>Gross Surplus (Rs.)</b>	<b>106555</b>	<b>78819</b>	<b>78819</b>	<b>89179</b>	<b>92019</b>	<b>89179</b>

<b>Financial Analysis</b>						
<b>Particulars / Years</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
<b>Cost (Rs.)</b>						
Capital cost	1,70,000					
Recurring cost	111030	140680	140680	143560	140680	143560
Total cost	2,81,030	140680	140680	143560	140680	143560
<b>Benefits (Rs.)</b>						
Income	<b>217585</b>	<b>219499</b>	<b>219499</b>	<b>232739</b>	<b>232699</b>	<b>232739</b>
Closing Stock Value						20000
Total benefits	<b>217585</b>	<b>219498.72</b>	<b>219498.72</b>	<b>232739.04</b>	<b>232698.72</b>	<b>252739.04</b>
Net benefits	-63445	78819	78819	89179	92019	109179
Discount Factor	0.869	0.756	0.657	0.571	0.497	0.432
Discounted benefits	189082	165941	144211	132894	115651	109266
Discounted costs	244215	106354	92427	81973	69918	62065
<b>Net Present Value</b>		<b>Rs. 2,00,192.66</b>				
<b>Benefit Cost Ratio (BCR)</b>					<b>1.30</b>	
<b>Internal Rate of Return (IRR) of the Scheme</b>					<b>125.93%</b>	
<b>Average DSCR</b>					<b>2.4</b>	

<b>Bankability</b>						
<b>Year</b>	<b>Loan outstanding</b>	<b>Gross Surplus</b>	<b>Interest @ 12%</b>	<b>Principal Paid</b>	<b>Total Repayment</b>	<b>Net Surplus</b>
I	151691	106555	18203	0	18203	88352
II	151691	78819	18203	30338	48541	30278
III	121353	78819	14562	30338	44901	33918
IV	91015	89179	10922	30338	41260	47919
V	60676	92019	7281	30338	37619	54399
VI	30338	89179	3641	30338	33979	55200
<b>Total</b>		<b>534570</b>	<b>72812</b>	<b>151691</b>	<b>224503</b>	

<b>Techno economic parameters</b>	
Breed of Animal	Desi Breed -Tharparkar
No. of Animals	2
Cost of Animals (Rs.)	80,000
Average Milk Yield (litres/day)	8
Cost of equipment per animal (Rs.)	1000
Insurance premium (% per annum)	5
Insurance per animal (Rs)	4000
Veterinary aid/animal/ year (Rs.)	1000
Cost of concentrate feed (Rs./kg)	30
Concentrate required per animal per day during milking (Kg)	4.7
Concentrate required per animal per day during dry period (Kg)	1.5
Cost of dry fodder (Rs./kg)	5
Dry fodder required per day/animal (Kg)	2.5
Cost of green fodder (Rs./kg)	4
Green fodder required per day/animal (Kg)	15
Margin (%)	60
Rate of interest (%)	12
Repayment period	6 years
Selling price of milk/litre (Rs./ litre)	55
Lactation days	300
Dry days	150
Freshly calved animals in 2 <sup>nd</sup> or 3 <sup>rd</sup> lactation are purchased in two batches at an interval of 4 to 6 months.	
Cost of rearing calves not considered as it will be nullified by their sale value or retention value.	

## 6. Unit Cost of 2 Desi/Indigenous (Haryana/Rathi) Cows

S.No	Particulars	Unit Cost for 2023-24 (Rs.)
1	Total Financial Outlay	1,56,020.00
2	Margin Money (15%)	23,403.00
3	Bank Loan (85%)	1,32,617.00

Particulars	Unit Cost 2023-24 (Rs.)
<b>A. Capital Cost</b>	
Cost of 2 Desi cow (Haryana/Rathi Breed) with Avg milk yield of 6 lit. per day (@ 70,000/- each animal)	1,40,000.00
Equipment cost @ 1000 per animal	2,000.00
<b>Sub Total</b>	<b>1,42,000.00</b>
<b>B. Working Capital</b>	
Concentrate Feeding cost (for one month)117 kgs @ Rs. 30/kg	7,020.00
Insurance (@ 5% animal cost)	7,000.00
<b>Sub Total</b>	<b>14,020.00</b>
<b>Total Outlay</b>	<b>1,56,020.00</b>
<b>Margin (15%)</b>	<b>23,403.00</b>
<b>Bank Loan (85%)</b>	<b>1,32,617.00</b>

The price of the animal varies according to age, stage of calving, milk yield, percentage of bloodline of purebred and other local factors. Purity of the breed should be certified by the Competent Lab/University/ State/National Agencies like NDDB, MLDB etc. The animals should be free from TB, JD & Brucellosis. The average cost of animal may increase by Rs.5,000/- to Rs.8,000/- for every one litre increase in yield.

In addition to the above, the transportation charges may also add to the total cost. Banks may take the above factors into consideration while financing under dairy sector.

<b>Project Profitability</b>						
<b>Particulars / Years</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
<b>Income (Rs.)</b>						
I. From sale of Milk	158400	158400	158400	168300	168300	168300
II. From sale of Manure	6184.8	8092.8	8092.8	8121.6	8092.8	8121.6
III. Income from Gunny Bags	39	45	45	46	45	46
<b>Total Income</b>	<b>164624</b>	<b>166537</b>	<b>166537</b>	<b>176468</b>	<b>176437</b>	<b>176468</b>
<b>Expenditure (Rs.)</b>						
1. Concentrate Feed	58860	66960	66960	69120	66960	69120
2. Green Fodder	32400	43200	43200	43200	43200	43200
3. Dry Fodder	6750	9000	9000	9000	9000	9000
4. Veterinary Aid	1500	2000	2000	2000	2000	2000
5. Insurance		7000	7000	7000	7000	7000
<b>Total Expenditure</b>	<b>99510</b>	<b>128160</b>	<b>128160</b>	<b>130320</b>	<b>128160</b>	<b>130320</b>
<b>Gross Surplus (Rs.)</b>	<b>65114</b>	<b>38377</b>	<b>38377</b>	<b>46148</b>	<b>48277</b>	<b>46148</b>

<b>Financial Analysis</b>						
<b>Particulars / Years</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>	<b>VI</b>
<b>Cost (Rs.)</b>						
Capital cost	1,49,000					
Recurring cost	99510	128160	128160	130320	128160	130320
Total cost	2,48,510	128160	128160	130320	128160	130320
<b>Benefits (Rs.)</b>						
Income	164624	166537	166537	176468	176437	176468
Closing Stock Value						20000
Total benefits	164624	166537.44	166537.44	176467.68	176437.44	196467.68
Net benefits	-83886	38377	38377	46148	48277	66148
Discount Factor	0.869	0.756	0.657	0.571	0.497	0.432
Discounted benefits	143058	125902	109415	100763	87689	84938
Discounted costs	215955	96889	84201	74413	63696	56341
<b>Net Present Value</b>		<b>Rs. 60,293.31</b>				
<b>Benefit Cost Ratio (BCR)</b>					<b>1.10</b>	
<b>Internal Rate of Return (IRR) of the Scheme</b>					<b>43.07%</b>	
<b>Average DSCR</b>					<b>1.4</b>	

<b>Bankability</b>						
<b>Year</b>	<b>Loan outstanding</b>	<b>Gross Surplus</b>	<b>Interest @ 12%</b>	<b>Principal Paid</b>	<b>Total Repayment</b>	<b>Net Surplus</b>
I	132617	65114	15914	0	15914	49200
II	132617	38377	15914	26523	42437	-4060
III	106094	38377	12731	26523	39255	-877
IV	79570	46148	9548	26523	36072	10076
V	53047	48277	6366	26523	32889	15388
VI	26523	46148	3183	26523	29706	16441
<b>Total</b>		<b>282442</b>	<b>63656</b>	<b>132617</b>	<b>196273</b>	

<b>Techno economic parameters</b>	
Breed of Animal	Desi Breed -Haryana/Rathi
No. of Animals	2
Cost of Animals (Rs.)	70,000
Average Milk Yield (litres/day)	6
Cost of equipment per animal (Rs.)	1000
Insurance premium (% per annum)	5
Insurance per animal (Rs)	3500
Veterinary aid/animal/ year (Rs.)	1000
Cost of concentrate feed (Rs./kg)	30
Concentrate required per animal per day during milking (Kg)	3.9
Concentrate required per animal per day during dry period (Kg)	1.5
Cost of dry fodder (Rs./kg)	5
Dry fodder required per day/animal (Kg)	2.5
Cost of green fodder (Rs./kg)	4
Green fodder required per day/animal (Kg)	15
Margin (%)	60
Rate of interest (%)	12
Repayment period	6 years
Selling price of milk/litre (Rs./ litre)	55
Lactation days	300
Dry days	150
Freshly calved animals in 2 <sup>nd</sup> or 3 <sup>rd</sup> lactation are purchased in two batches at an interval of 4 to 6 months.	
Cost of rearing calves not considered as it will be nullified by their sale value or retention value.	

## Goat and Sheep Rearing



### 1. Unit Cost of Goat Rearing (10+1, Osmanabadi/Sangamneri/Konkan/Kanyal/Berari)

S.No	Particulars	Unit Cost for 2023-24 (Rs.)
1	Total Financial Outlay	1,47,963.00
2	Margin Money (15%)	22,194.00
3	Bank Loan (85%)	1,25,768.00

Particulars	Unit Cost 2023-24 (Rs.)
<b>A. Capital expenditure</b>	
Cost of Does (10 animals @ Rs.8000 each)	80,000.00
Cost of Buck (1 animal @ Rs 10,000)	10,000.00
Cost of low cost shed/night shelter (Area required- 20 sq.ft/Buck; 10 sq.ft/Doe, 4 sqft/kid, Cost-Rs200/sq.ft)	45,000.00
Equipment including water facility (feeder, water dispenser etc.) @Rs.100/animal	1,100.00
<b>Total Capital expenditure</b>	<b>1,36,100.00</b>
<b>B. Recurring expenditure (for one time only)</b>	
Insurance cost for the adults (5% cost of adults)	4,500.00

Veterinary aid including vaccination @Rs.100/animal/year for 11 animals	1,100.00
Concentrate feeding (@ 7.5 kg/Doe/month for 3 months, 8.5 kg/Buck/month for 3 months, Concentrate cost Rs. 25/kg)	6,263.00
<b>Total Recurring expenditure</b>	<b>11,863.00</b>
<b>Total Financial Outlay</b>	<b>1,47,963.00</b>
<b>Margin Money (15%)</b>	<b>22,194.00</b>
<b>Bank Loan (85%)</b>	<b>1,25,768.00</b>

## 2. Unit Cost of Goat Rearing (10+1, Non-descript)

S.No	Particulars	Unit Cost for 2023-24 (Rs.)
1	Total Financial Outlay	1,24,863.00
2	Margin Money (15%)	18,729.00
3	Bank Loan (85%)	1,06,133.00

Particulars	Unit Cost 2023-24 (Rs.)
<b>A. Capital expenditure</b>	
Cost of Does (10 animals @ Rs.6000 each)	60,000.00
Cost of Buck (1 animal @ Rs 8,000)	8,000.00
Cost of low cost shed/night shelter (Area required-20 sq.ft/ Buck; 10 sq.ft/ Doe, 4 sqft/kid, Cost-Rs200/sq.ft)	45,000.00
Equipment including water facility (feeder, water dispenser etc.) @Rs.100/animal	1,100.00
<b>Total Capital expenditure</b>	<b>1,14,100.00</b>
<b>B. Recurring expenditure (for one time only)</b>	
Insurance cost for the adults (5% cost of adults)	3,400.00
Veterinary aid including vaccination @Rs.100/animal/year for 11 animals	1,100.00
Concentrate feeding (@ 7.5kg/Doe/month for 3 months, 8.5 kg/ Buck /month for 3 months, Concentrate cost Rs 25/kg)	6,263.00
<b>Total Recurring expenditure</b>	<b>10,763.00</b>
<b>Total Financial Outlay</b>	<b>1,24,863.00</b>
<b>Margin Money (15%)</b>	<b>18,729.00</b>
<b>Bank Loan (85%)</b>	<b>1,06,133.00</b>

### 3. Unit Cost of Sheep Rearing - Madgyal Breed (10+1)

S.No	Particulars	Unit Cost for 2023-24 (Rs.)
1	Total Financial Outlay	1,71,063.00
2	Margin Money (15%)	25,659.00
3	Bank Loan (85%)	1,45,403.00

Particulars	Unit Cost 2023-24 (Rs.)
<b>A. Capital expenditure</b>	
Cost of Ewes (10 animals @ Rs.10,000 each)	1,00,000.00
Cost of Ram (1 animal @ Rs 12,000)	12,000.00
Cost of low cost shed/night shelter (Area required-20 sq.ft/Ram;10 sq.ft/doe, 4 sqft/kid, Cost-Rs200/sq.ft)	45,000.00
Equipment including water facility (feeder, water dispenser etc.) @Rs.100/animal	1,100.00
<b>Total Capital expenditure</b>	<b>1,58,100.00</b>
<b>B. Recurring expenditure (for one time only)</b>	
Insurance cost for the adults (5% cost of adults)	5,600.00
Veterinary aid including vaccination@Rs.100/animal/year for 11 animals	1,100.00
Concentrate feeding (@ 7.5kg/Ewe/month for 3 months, 8.5 kg/Ram/month for 3 months, Concentrate cost Rs 25/kg)	6,263.00
<b>Total Recurring expenditure</b>	<b>12,963.00</b>
<b>Total Financial Outlay</b>	<b>1,71,063.00</b>
Margin Money (15%)	<b>25,659.00</b>
Bank Loan (85%)	<b>1,45,403.00</b>

<b>Techno-economic parameters:</b>		
	<b>Particulars</b>	<b>Assumptions</b>
<b>A</b>	<b>Basic Parameters</b>	
1	<b>Unit size</b>	<b>10+1</b>
2	Breed	Madgyal
3	System rearing	Semi intensive
4	No. of animals	11
	Ewes	10
	Rams	1
<b>B</b>	<b>Production traits</b>	
1	Age at Maturity (Months)	10 to 12
2	Lambing interval (Months)	8
3	Lambing percentage (%)	85
4	Twinning percentage (%)	60
5	No. of kiddings per year	1.5
6	Sex ratio	1.1
7	Mortality (%) Adults	5
8	Mortality (%) Lambs	10
9	Culling of Ewes (%) per year from second year onwards	20
<b>C</b>	<b>Expenditure Norms</b>	
1	Purchase price of Ram (Rs/animal)	12,000
2	Purchase price of Ewes (Rs/animal)	10,000
3	Space required	
	Ram (sqft/head)	20
	Ewe (sqft/head)	10
	Kid (sqft/head)	4
4	Cost of construction (Rs./sqft)	200
5	Cost of equipment (Rs./animal)	100
6	Cultivation	
	No of acres of land required for 10+1 unit in acres	0.5 to 1
	Cost of green fodder cultivation (Rs.)	20000
7	Concentrate Feed Required	
	Ewes (kg/month for 3 months)	7.5
	Ram (kg/month for 3 months)	8.5
	Kids (kg/month for 1 month)	3.75
8	Cost of conc. Feed (Rs./kg)	25
9	Labour	Nil
10	Insurance (as percentage (%) of the cost of breeding stock)	5
11	Veterinary aid (Rs./adult/year)	100
12	Misc. Charges (Rs./animal /year)	100
<b>D</b>	<b>Income Norms</b>	
1	Sale price of male kids (@ 6-9 months of age, Avg 20 kg BW@Rs.350/kg)	7,000
2	Sale price of female kids (@ 6-9 months of age, Avg 20 kg BW@Rs.320/kg)	6,400
3	Sale price of culled Ram	6,250
4	Sale price of culled Ewes	5,000
5	Value of closing stock -Adult (Rs/animal)	7500
6	Value of closing stock -Young (Rs/animal)	7,000
7	Income from manure / year (utilised in own farm)	
<b>E</b>	<b>Repayment Norms</b>	
1	Rate of interest (%)	12
2	Margin (%)	15
3	Loan amount (%)	85
4	Repayment period (Years)	1+5
5	Discount Factor (%)	15

<b>Income &amp; Expenditure</b>						
<b>Particulars</b>	<b>I year</b>	<b>II year</b>	<b>III year</b>	<b>IV year</b>	<b>V year</b>	<b>VI year</b>
<b>Expenditure:</b>						
Capital Cost	171063	0	0	0	0	0
Recurring Cost						
Concentrate Feed Cost	1125	8044	8700	9759	10535	11030
Green Fodder Cultivation	10000	10000	10000	10000	10000	10000
Insurance Cost		5600	5600	5600	5600	5600
Veterinary Aid		2100	2200	2300	2500	2400
Misc.cost	2300	3500	3700	3830	4158	4185
<b>Total costs</b>	<b>184488</b>	<b>29244</b>	<b>30200</b>	<b>31489</b>	<b>32793</b>	<b>33215</b>
<b>Income:</b>						
By sale of Male kids / Ramlings	0	63000	56000	49000	49000	42000
By sale of Female kids / Ewelings	0	19200	12800	12800	25600	38400
By sale of culled Ewes	0	0	10000	10000	10000	20000
By sale of culled Rams	0	0	6250	0	0	6250
Total	0	82200	85050	71800	84600	106650
Value of closing stock						137500
Total Benefits	0	82200	85050	71800	84600	244150
<b>Net Profit</b>	<b>-184488</b>	<b>52956</b>	<b>54850</b>	<b>40311</b>	<b>51807</b>	<b>210935</b>
<b>Discount Factor (15%)</b>						
	0.87	0.76	0.66	0.57	0.50	0.43
Discounted benefits	0	62143	55878	40998	42046	105553
Discounted costs	160320	22108	19841	17980	16298	14360
BCR	1.22					
NPV	55681.68					
IRR	26%					
DSCR	1.80					

<b>Bankability</b>						
<b>Year</b>	<b>Loan outstanding</b>	<b>Profit</b>	<b>Principal Repayment</b>	<b>Interest @12%</b>	<b>Total Repayment</b>	<b>Net Surplus</b>
I	145403	-23425	0	17448	17448	-40873
II	145403	52956	29081	17448	46529	6427
III	116323	54850	29081	13959	43039	11811
IV	87242	40311	29081	10469	39550	761
V	58161	51807	29081	6979	36060	15747
VI	29081	210935	29081	3490	32570	178365
		<b>387435</b>	<b>145403</b>	<b>69794</b>	<b>215197</b>	

#### 4. Unit Cost of Sheep Rearing - Deccani/Other local breeds (10+1)

S.No	Particulars	Unit Cost for 2023-24 (Rs.)
1	Total Financial Outlay	1,71,063.00
2	Margin Money (15%)	25,659.00
3	Bank Loan (85%)	1,45,403.00

Particulars	Unit Cost 2023-24 (Rs.)
<b>A. Capital expenditure</b>	
Cost of Ewes (10 animals @ Rs.8000 each)	80,000.00
Cost of Ram (1 animal @ Rs 10,000)	10,000.00
Cost of low cost shed/night shelter (Area required-20 sq.ft/Ram;10 sq.ft/Ewe, 4 sqft/kid, Cost-Rs200/sq.ft)	45,000.00
Equipment including water facility (feeder, water dispenser etc.) @Rs.100/animal	1,100.00
<b>Total Capital expenditure</b>	<b>1,36,100.00</b>
<b>B. Recurring expenditure (for one time only)</b>	
Insurance cost for the adults (5% cost of adults)	4,500.00
Veterinary aid including vaccination@Rs.100/animal/year for 11 animals	1,100.00
Concentrate feeding (@ 7.5kg/Ewe/month for 3 months, 8.5 kg/Ram/month for 3 months, Concentrate cost Rs 25/kg)	6,263.00
<b>Total Recurring expenditure</b>	<b>11,863.00</b>
<b>Total Financial Outlay</b>	<b>1,47,963.00</b>
<b>Margin Money (15%)</b>	<b>22,194.00</b>
<b>Bank Loan (85%)</b>	<b>1,25,768.00</b>

<b>Techno-economic parameters:</b>		
	<b>Particulars</b>	<b>Assumptions</b>
<b>A</b>	<b>Basic Parameters</b>	
1	<b>Unit size</b>	<b>10+1</b>
2	Breed	Deccani
3	System rearing	Semi intensive
4	No. of animals	11
	Ewes	10
	Rams	1
<b>B</b>	<b>Production traits</b>	
1	Age at Maturity (Months)	10 to 12
2	Lambing interval (Months)	8
3	Lambing percentage %	75
4	Twinning percentage %	60
5	No. of kiddings per year	1.5
6	Sex ratio	1.1
7	Mortality(%) Adults	5
8	Mortality (%) Lambs	10
9	Culling of Ewes per year from second year onwards (%)	20
<b>C</b>	<b>Expenditure Norms</b>	
1	Purchase price of Ram (Rs/animal)	10,000
2	Purchase price of Ewes (Rs/animal)	8,000
3	Space required	
	Ram (sqft/head)	20
	Ewe (sqft/head)	10
	Kid (sqft/head)	4
4	Cost of construction (Rs/sqft)	200
5	Cost of equipment (Rs/animal)	100
6	Cultivation	
	No of acres of land required for 10+1 unit in acres	0.5 to1
	Cost of green fodder cultivation in Rs.	20000
7	Concentrate Feed Required	
	Ewes (kg/month for 3 months)	7.5
	Ram (kg/month for 3 months)	8.5
	Kids (kg/month for 1 month)	3.75
8	Cost of conc. Feed Rs./kg	25
9	Labour	Nil
10	Insurance (as percentage of the cost of breeding stock)	5
11	Veterinary aid (Rs./adult/year)	100
12	Misc. Charges (Rs./animal /year)	100
<b>D</b>	<b>Income Norms</b>	
1	Sale price of male kids(@ 6-9 months of age, Avg 20 kg BW@Rs.350/kg)	7,000
2	Sale price of female kids (@ 6-9 months of age, Avg 20 kg BW@Rs.320/kg)	6,400
3	Sale price of culled Ram	6,250
4	Sale price of culled Ewes	5,000
5	Value of closing stock -Adult (Rs/animal)	7500
6	Value of closing stock -Young (Rs/animal)	7,000
7	Income from manure / year (utilised in own farm)	
<b>E</b>	<b>Repayment Norms</b>	
1	Rate of interest (%)	12
2	Margin (%)	15
3	Loan amount (%)	85
4	Repayment period (Years)	1+5
5	Discount Factor (%)	15

## Income & Expenditure

Particulars	I year	II year	III year	IV year	V year	VI Year
<b>Expenditure:</b>						
Capital Cost	1,47,963	0	0	0	0	0
Rec Cost						
Concentrate Feed Cost	996	8,196	9,427	9,802	10,557	11,975
Green Fodder Cultivation	20000	20000	20000	20000	20000	20000
Insurance Cost		4,500	4,500	4,500	4,500	4,500
Veterinary Aid		2100	2200	2600	2800	3100
Misc.cost	2163	3163	3475	3875	4181	4694
<b>Total costs</b>	<b>1,71,121</b>	<b>37,959</b>	<b>39,602</b>	<b>40,777</b>	<b>42,039</b>	<b>44,269</b>
<b>Income:</b>						
By sale of Male kids /Ramlings	0	35000	28000	49000	49000	56000
By sale of Female kids /Eweling	0	12800	12800	12800	12800	12800
By sale of culled Ewes	0	0	10000	10000	10000	20000
By sale of culled Rams	0	0	6250	0	0	6250
<b>Total</b>	<b>0</b>	<b>47800</b>	<b>57050</b>	<b>71800</b>	<b>71800</b>	<b>95050</b>
Value of closing stock						217500
<b>Total Benefits</b>	<b>0</b>	<b>47800</b>	<b>57050</b>	<b>71800</b>	<b>71800</b>	<b>312550</b>
Net Profit	-1,71,121	9,841	17,448	31,023	29,761	2,68,281
<b>Discount Factor (15%)</b>	<b>0.87</b>	<b>0.76</b>	<b>0.66</b>	<b>0.57</b>	<b>0.50</b>	<b>0.43</b>
<b>Discounted benefits</b>	<b>0.0</b>	<b>36136.8</b>	<b>37481.9</b>	<b>40997.8</b>	<b>35684.6</b>	<b>135124.0</b>
<b>Discounted costs</b>	<b>148704.2</b>	<b>28696.7</b>	<b>26018.2</b>	<b>23283.4</b>	<b>20893.2</b>	<b>19138.8</b>
<b>BCR</b>	<b>1.1</b>					
<b>NPV</b>	<b>18632.8</b>					
<b>IRR</b>	<b>18%</b>					
<b>DSCR</b>	<b>1.9</b>					

Bankability						
Year	Loan outstanding	Profit	Principal Repayment	Interest @12%	Total Repayment	Net Surplus
I	125768	-23231	0	15092	15092	-38323
II	125768	47381	25154	15092	40246	7135
III	100615	41500	25154	12074	37227	4273
IV	75461	41194	25154	9055	34209	6985
V	50307	39944	25154	6037	31190	8753
VI	25154	163425	25154	3018	28172	135253
		<b>310213</b>	<b>125768</b>	<b>60369</b>	<b>186137</b>	

## Poultry



### Poultry Layer Farm (1000 Birds)

Unit cost for 1000 poultry layer birds		
S.No	Particulars	Unit Cost 2023-24 (Rs.)
<b>A</b>	<b>Capital Cost</b>	
1	Poultry shed 1000 sqft @Rs.250/sqft	2,50,000.00
2	Cage system (@Rs. 120/per bird)	1,20,000.00
	<b>Sub Total</b>	<b>3,70,000.00</b>
<b>B</b>	<b>Initial Recurring cost</b>	
1	Cost of birds @Rs.250/ bird (15 weeks old)	2,50,000.00
2	Insurance cost @Rs.5/bird cost	5,000.00
3	Feed Cost (For initial 3 months)	2,52,000.00
4	Labour Cost (For initial 3 months)	15,000.00
5	Miscellaneous Cost @ 100/bird	1,00,000.00
	<b>Sub Total</b>	<b>6,22,000.00</b>
<b>C</b>	<b>Total Outlay</b>	<b>9,92,000.00</b>
<b>D</b>	<b>Margin Money</b>	<b>1,48,800.00</b>
<b>E</b>	<b>Bank Loan</b>	<b>8,43,200.00</b>

### Unit Cost of Contract Farming - 5000 broilers

S.No	Particulars	Unit Cost for 2023-24 (Rs.)
<b>A</b>	<b>Capital expenditure</b>	
1	Cost of shed@ 1 sqft/bird @ Rs. 250/sq. ft.	12,50,000.00
2	Cost of equipment@ Rs. 30/bird	1,50,000.00
3	Electricity & water supply	30,000.00
	<b>Total Capital expenditure</b>	<b>14,30,000.00</b>
<b>B</b>	<b>Recurring expenditure (for one time only)</b>	
1	Cost of Day Old Chicks	Provided by company
2	Feed & Medicine	Provided by company
3	Labour charges 2 labourers @ Rs. 5000 pm	24,000.00
4	Electricity & Water@Rs.2000 pm	4,800.00
5	Miscellaneous (Insurance) @ Rs 1/bird	5,000.00
	<b>Total Recurring expenditure</b>	<b>33,800.00</b>
<b>C</b>	<b>Total Financial Outlay</b>	<b>14,63,800.00</b>
<b>D</b>	<b>Margin Money (17.50%)</b>	<b>2,56,165.00</b>
<b>E</b>	<b>Bank Loan (82.50%)</b>	<b>12,07,635.00</b>

### Unit Cost of 5000 broilers farming

S.No	Particulars	Unit Cost for 2023-24 (Rs)
<b>A</b>	<b>Capital expenditure</b>	
1	Cost of shed@ 1 sqft/bird @ Rs. 250/sq. ft.	12,50,000.00
2	Cost of equipment@ Rs. 30/bird	1,50,000.00
3	Electricity & water supply	30,000.00
	<b>Total Capital expenditure</b>	<b>14,30,000.00</b>
<b>B</b>	<b>Recurring expenditure (for one time only)</b>	
1	Cost of Day Old Chicks @ Rs. 38/ chick, 5000+5% chicks-2% extra birds from hatchery i.e. 5150 bird/batch	1,95,700.00
2	Feed @ 3.5 Kg/bird @Rs. 35/kg per batch	6,12,500.00
3	Labour charges @ Rs.5000pm, 2 labourers	24,000.00
4	Electricity & Water@Rs.2000 pm	4,800.00
5	Miscellaneous - Medicine/ Vaccine/ Insurance/Other Misc. @ Rs. 5 per bird per batch	25,000.00
	<b>Total Recurring expenditure</b>	<b>8,62,000.00</b>
<b>C</b>	<b>Total Financial Outlay</b>	<b>22,92,000.00</b>
<b>D</b>	<b>Margin Money (17.50%)</b>	<b>4,01,100.00</b>
<b>E</b>	<b>Bank Loan (82.50%)</b>	<b>18,90,900.00</b>

## 7. Integrated Farming System (IFS) - Models suggested by 04 Agriculture Universities

On the basis of data/information received from AUs viz; Mahatma Phule Krishi Vidyapeeth (MPKV), Rahuri, Ahmednagar, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth (BSKKV), Dapoli, Vasantnao Naik Marathwada Krishi Vidyapeeth (VNMKV), Parbhani and Dr. Panjabrao Deshmukh Krishi Vidyapeetha (PDKV), Akola, Unit Cost for Integrated Farming Model has been worked out. The salient features of Models in brief are as under:

### i) Mahatma Phule Krishi Vidyapeeth (MPKV), Rahuri, Ahmednagar – Irrigated

S.No	Component	Unit Cost 2023-24			
1	Crop Loan (72%)	0			
2	Horticulture (23.60%)	175070			
3	Animal Husbandry (4.40%)	349126			
	<b>Total Outlay</b>	<b>524196</b>			
	<b>Margin (10%)</b>	<b>52420</b>			
	<b>Bank Loan (90%)</b>	<b>471776</b>			
Area (In Hectare)	Components	Total Income (1st Year)	Expenditure (in Rs.)		Total Expenditure
			Recurring	Fixed	
<b>Crop loan Component (72%) Kharif/Rabi/Summer</b>					
0.30	Soyabean/Wheat/Leafy Vegetable	58993	19613	0	57597 (To be met through KCC)
0.20	Maize/Onion/Green Gram	84152	19782		
0.10	Pearlmillet/Chickpea/Cowpea	16120	5420		
0.10	Lucerne	29861	12782		
0.02	Hy.Napier				
<b>0.72</b>	<b>Total</b>	<b>189126</b>	<b>57597</b>	<b>0</b>	<b>57597</b>
<b>Horticulture Component (23.60%)</b>					
0.20	Orchard - 80 Plants (Mango (Keshar) -5m x5m)	0	10000	10000	20000
0.036	Shadenet : 1st and 3rd Year - Tomato – Cucurbits/2nd and 4th Year- Capsicum - CucurbitsShadenet : 1st and 3rd Year -Tomato – Cucurbits/2nd and 4th Year- Capsicum - Cucurbits	224565	50070	105000	155070
<b>0.24</b>	<b>Total</b>	<b>224565</b>	<b>60070</b>	<b>115000</b>	<b>175070</b>
<b>Animal component (4.4%)</b>					
0.044	Milch Cow - 2 Cross Breed Cow (Phule Triveni),Vermicompost unit – 4 beds, Poultry-100 birds RIR reared in 5 lots (500birds / year),	274842	153126	Rs 196000 [Cows-130000, Vermibeds Rs 8000 (Tetra -Rs 2000 NADEP-Rs 6000) Poultry shed-Rs 50000]	349126
<b>0.044</b>	<b>Total</b>	<b>274842</b>	<b>153126</b>	<b>196000</b>	<b>349126</b>
<b>1.00</b>	<b>TOTAL COST</b>	<b>499407</b>	<b>213196</b>	<b>311000</b>	<b>524196</b>

<b>Economics</b>								
S.No.	Particulars	1 Yr	2 Yr	3 Yr	4 Yr	5 Yr	6 Yr	7 Yr
i	Costs (1st year Recurring + Fixed)	524196	234516	257967	283764	312140	343354	377690
ii	Income	499407	549348	604282	664711	731182	804300	884730
iii	Net Income	-24789	314832	346315	380947	419042	460946	507040
iv	Discount Rate (15%)	0.87	0.76	0.66	0.57	0.50	0.43	0.38
v	Discounted Costs	455823	177327	169618	162243	155189	148442	141988
vi	Discounted Income	434267	415386	397326	380051	363527	347721	332603
	<b>Internal Rate of Return (IRR)</b>	<b>1280.05%</b>						
	<b>Benefit Cost Ratio (BCR)</b>	<b>1.99</b>						
	<b>Net Present Value (NPV)</b>	<b>Rs. 17,83,796</b>						

<b>Loan Details</b>		
S.No.	Particulars	Amt (Rs)
a	Unit Cost (Total outflow)	524196
b	Margin Money (10%)	52420
c	Bank Loan (90%)	471776
d	Rate of Interest	12.0%

<b>Repayment Schedule</b>							Amt in Rs	
Year	Bank Loan	Loan O/s Beginning of the Year	Loan O/s End of the Year	Surplus	Repayment		Total Outgo	Net Surplus
					Interest	Principal		
Year 1	471776	471776	471776	0	56613	0	56613	-56613
Year 2		471776	393147	314832	56613	78629	135242	179590
Year 3		393147	314518	346315	47178	78629	125807	220508
Year 4		314518	235888	380947	37742	78629	116371	264575
Year 5		235888	157259	419042	28307	78629	106936	312106
Year 6		157259	78630	460946	18871	78629	97500	363445
Year 7		78630	0	507040	9436	78629	88065	418975
<b>Total</b>	<b>471776</b>			<b>2429122</b>	<b>254759</b>	<b>471776</b>	<b>726535</b>	<b>1702586</b>
					<b>DSCR =</b>	<b>3.34</b>		

**NOTE-** The expenditure includes capital expenditure and the recurring expenditure for first year

**ii) Mahatma Phule Krishi Vidyapeeth (MPKV), Rahuri, Ahmednagar - Dryland**

S.No	Component	Unit Cost 2023-24			
1	Crop Loan (50%)	0			
2	Horticulture (40%)	19333			
3	Animal Husbandry (5%)	274360			
	<b>Total Outlay</b>	<b>293693</b>			
	<b>Margin (10%)</b>	<b>29369</b>			
	<b>Bank Loan (90%)</b>	<b>264324</b>			
Area (In Hectare)	Components	Total Income (1st Year)	Expenditure (in Rs.)		Total Expenditure
			Recurring	Fixed	
<b>Crop Component (50%) (Kharif/Rabi/Summer)</b>					
0.30	Cowpea/Sorghum/Fallow	20500	12363	0	12363 (To be met through KCC)
0.10	Maize fodder/Sorghum fodder/Fallow				
0.10	Fallow/Chickpea/Fallow				
<b>0.50</b>	<b>Total</b>	<b>20500</b>	<b>12363</b>	<b>0</b>	<b>12363</b>
<b>Horticulture Component (40%)</b>					
0.40	Aonla orchard with inter crop of (Pearl millet + Pigeon pea 2:1)	17040	9333	10000	19333
<b>0.40</b>	<b>Total</b>	<b>17040</b>	<b>9333</b>	<b>10000</b>	<b>19333</b>
<b>Animal component (5%)</b>					
0.05	Milk animal-1 buffalo, Poultry-30 birds in 5 lots/year (Breed-Giriraja) and Goat rearing 10 female + 1 male (Breed-Osmanabadi)	115240	54360	Buffalo-Rs 60,000, Poultry Shed Rs 70,000, 10 Does+1 Buck Rs 90,000	274360
<b>0.05</b>	<b>Total</b>	<b>115240</b>	<b>54360</b>	<b>220000</b>	<b>274360</b>
<b>Farm Pond (5%)</b>					
<b>0.05</b>	Farm pond size 15X15X03 mtr	-		-	-
<b>1.00</b>	<b>TOTAL COST</b>	<b>132280</b>	<b>63693</b>	<b>230000</b>	<b>293693</b>

<b>Economics</b>								
S.No.	Particulars	1 Yr	2 Yr	3 Yr	4 Yr	5 Yr	6 Yr	7 Yr
i	Costs (1st year Recurring + Fixed)	293693	70062	77069	84775	93253	102578	112836
ii	Income	132280	145508	160059	176065	193671	213038	234342
iii	Net Income	-161413	75446	82990	91289	100418	110460	121506
iv	Discount Rate (15%)	0.87	0.76	0.66	0.57	0.50	0.43	0.38
v	Discounted Costs	255385	52977	50674	48471	46363	44347	42419
vi	Discounted Income	115026	110025	105241	100666	96289	92102	88098
	<b>Internal Rate of Return (IRR)</b>	<b>54.55%</b>						
	<b>Benefit Cost Ratio (BCR)</b>	<b>1.44</b>						
	<b>Net Present Value (NPV)</b>	<b>Rs. 2,92,272</b>						

<b>Loan Details</b>		
S.No.	Particulars	Amt (Rs)
a	Unit Cost	293693
b	Margin Money (10%)	29369
c	Bank Loan (90%)	264324
d	Rate of Interest	12.0%

<b>Repayment Schedule</b>							Amt in Rs	
Year	Bank Loan	Loan O/s Beginning of the Year	Loan O/s End of the Year	Surplus	Repayment		Total Outgo	Net Surplus
					Interest	Principal		
Year 1	264324	264324	264324	0	31719	0	31719	-31719
Year 2		264324	234954	75446	31719	29369	61088	14358
Year 3		234954	205585	82990	28195	29369	57564	25426
Year 4		205585	176216	91289	24670	29369	54040	37250
Year 5		176216	146847	100418	21146	29369	50515	49903
Year 6		146847	117477	110460	17622	29369	46991	63469
Year 7		117477	88108	121506	14097	29369	43467	78039
Year 8		88108	58739	133657	10573	29369	39942	93714
Year 9		58739	29369	147022	7049	29369	36418	110604
Year 10		29369	0	161725	3524	29369	32894	128831
<b>Total</b>	<b>264324</b>			<b>1024513</b>	<b>190313</b>	<b>264324</b>	<b>454637</b>	<b>569876</b>
					<b>DSCR =</b>	<b>2.25</b>		

**NOTE-** The expenditure includes capital expenditure and the recurring expenditure for first year

**iii) Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth (BSKKV), Dapoli**

S. No	Component	Unit Cost 2023-24
1	Crop Loan (50%)	0
2	Horticulture (40%)	68133
3	Animal Husbandry (1%)	446343
4	Vermicomposting (9%)	67200
	<b>Total Outlay</b>	<b>581676</b>
	<b>Margin (10%)</b>	<b>58168</b>
	<b>Bank Loan (90%)</b>	<b>523508</b>

Area (In Hectare)	Components	Total Income (1st Year)	Expenditure (in Rs.)		Total Expenditure
			Recurring	Fixed	
<b>Crop Component (50%) Kharif/Rabi</b>					
0.20	Rice/Brinjal+Watermelon	150951	87797	0	87797 (To be met through KCC)
0.05	Finger Millet/ Cowpea				
0.10	Groundnut/Field bean				
0.10	Cucumber/Sweet Corn				
0.05	Napier-Fodder crop				
<b>0.50</b>	<b>Total</b>	<b>150951</b>	<b>87797</b>	<b>0</b>	<b>87797</b>
<b>Horticulture Component (40%)</b>					
0.20	Mango-Ratna, Kesar & Alphonso	0	48133	20000	68133
0.05	Aonla (Krishna, Kanchan and Chakiya)				
0.05	Sapota (Kalipatti)				
0.05	Coconut +Intercrops (Black pepper/Cinnamon/Nutmeg)				
0.05	Nursery-Mango/Sapota grafts				
<b>0.40</b>	<b>Total</b>	<b>0</b>	<b>48133</b>	<b>20000</b>	<b>68133</b>
<b>Animal component (2%)</b>					
0.0035	(i) Dairy Animals 3 cows-2 Crossbred Jersey + 1 Local	112373	67713	150000	217713
0.0035	(ii) Goat unit (10 F + 2 M)-Konkan Kanyal	64277	51236	75000	126236
0.0035	(iii) Poultry 3 to 4 batches/year (150 to 200 birds/batch)-Giriraj and Kadaknath	69241	52394	50000	102394
<b>0.01</b>	<b>Total</b>	<b>245891</b>	<b>171343</b>	<b>275000</b>	<b>446343</b>
<b>0.09</b>	Vermicompost unit & other uses (8%)	<b>46316</b>	7200	60000	<b>67200</b>
<b>1.00</b>	<b>TOTAL</b>	<b>292207</b>	<b>226676</b>	<b>335000</b>	<b>581676</b>

<b>Economics</b>								
S.No.	Particulars	1 Yr	2 Yr	3 Yr	4 Yr	5 Yr	6 Yr	7 Yr
i	Costs (1st year Recurring + Fixed)	581676	249344	274278	301706	331876	365064	401570
ii	Income	292207	321428	353570	424285	509141	560056	616061
iii	Net Income	-289469	72084	79293	122579	177265	194992	214491
iv	Discount Rate (15%)	0.87	0.76	0.66	0.57	0.50	0.43	0.38
v	Discounted Costs	505805	188540	180342	172501	165001	157827	150965
vi	Discounted Income	254093	243046	232478	242586	253133	242128	231600
	<b>Internal Rate of Return (IRR)</b>	<b>41.39%</b>						
	<b>Benefit Cost Ratio (BCR)</b>	<b>1.21</b>						
	<b>Net Present Value (NPV)</b>	<b>Rs. 70,568</b>						

<b>Loan Details</b>		
S.No.	Particulars	Amt (Rs)
a	Unit Cost	581676
b	Margin Money (10%)	58168
c	Bank Loan (90%)	523508
d	Rate of Interest	12.0%

<b>Repayment Schedule</b>							Amt in Rs	
Year	Bank Loan	Loan O/s Beginning of the Year	Loan O/s End of the Year	Gross Surplus	Repayment		Total Outgo	Net Surplus
					Interest	Principal		
Year 1	523508	523508	523508		62821	0	62821	-62821
Year 2		523508	523508	72084	62821	0	62821	9263
Year 3		523508	523508	79293	62821	0	62821	16472
Year 4		523508	473508	122579	62821	50000	112821	9758
Year 5		473508	394590	177265	56821	78918	135739	41526
Year 6		394590	315672	177265	47351	78918	126269	50996
Year 7		315672	236754	214491	37881	78918	116799	97692
Year 8		236754	157836	235940	28411	78918	107329	128611
Year 9		157836	78918	259534	18940	78918	97858	161676
Year 10		78918	0	285487	9470	78918	88388	197099
<b>Total</b>	<b>523508</b>			<b>1623938</b>	<b>450158</b>	<b>523508</b>	<b>973666</b>	<b>650272</b>
					<b>DSCR =</b>	<b>1.67</b>		

**NOTE-** The expenditure includes capital expenditure and the recurring expenditure for first year

iv) Vasantnao Naik Marathwada Krishi Vidyapeeth, Parbhani

S. No	Component	Unit Cost 2023-24
1	Crop Loan (50%)	0
2	Horticulture (40%)	10000
3	Animal Husbandry (5%)	487886
4	Boundary Plantation (5%)	2552
5	Vermicomposting	23853
	<b>Total Outlay</b>	<b>524291</b>
	<b>Margin (10%)</b>	<b>52429</b>
	<b>Bank Loan (90%)</b>	<b>471862</b>

Area (In Hectare)	Components	Total Income (1st Year)	Expenditure (in Rs.)		Total Expenditure
			Recurring	Fixed	
<b>Crop Component</b>					
0.10	Soybean - Rabi Sorghum	13809	7663		77414 (67414 to be met through KCC)
0.10	Bt. Cotton	9690	6120		
0.10	Maize - Gram	22119	10789		
0.16	Greengram - Onion	16029	6644		
0.075	Lucerne	13912	6783		
0.075	Hybrid Napier – (Elephant grass)	23780	9984		
0.20	Kagzi lime with Soybean in Kharif & Cabbage/Cauliflower, Bottle gourd in rabi as a inter-crop	27250	12123	10000	
0.10	Condiments: Turmeric	12706	7309		
<b>0.91</b>	<b>Total</b>	<b>139296</b>	<b>67414</b>	<b>10000</b>	<b>67414+10000</b>
<b>Boundary plantation</b>					
0.05	Drum stick – <i>Moringa oleifera</i>	4708	1815		1815
	Anjan - <i>Hardwickia binnata</i>	1678	737		737
<b>0.05</b>	<b>Total</b>		<b>2552</b>	<b>0</b>	<b>2552</b>
<b>Animal component (5%)</b>					
0.04	Two Cow – Holdev (Cross bred) (H.F. x Deoni) and shed	121949	67091	165000	232091
	Goat : (5F+1M) and shed	235000	111795	144000	255795
<b>0.04</b>	<b>Total</b>		<b>1788860</b>	<b>309000</b>	<b>487886</b>
	<b>Vermicomposting Unit</b>	23351	11853	12000	<b>23853</b>
<b>1.00</b>	<b>TOTAL COST</b>	<b>386686</b>	<b>193291</b>	<b>331000</b>	<b>524291</b>

<b>Economics</b>								Amt in Rs.
S.No.	Particulars	1 Yr	2 Yr	3 Yr	4 Yr	5 Yr	6 Yr	7 Yr
i	Costs (1st year Recurring + Fixed)	524291	212620	233882	257270	282997	311297	342426
ii	Income	386686	425355	467890	514679	566147	622762	685038
iii	Net Income	-137605	212735	234008	257409	283150	311465	342612
iv	Discount Rate (15%)	0.87	0.76	0.66	0.57	0.50	0.43	0.38
v	Discounted Costs	455905	160771	153781	147095	140699	134582	128731
vi	Discounted Income	336249	321629	307645	294269	281475	269237	257531
	<b>Internal Rate of Return (IRR)</b>	<b>164.54%</b>						
	<b>Benefit Cost Ratio (BCR)</b>	<b>1.66</b>						
	<b>Net Present Value (NPV)</b>	<b>Rs. 1,12,720</b>						

#### **Loan Details**

S.No.	Particulars	Amt (Rs)
a	Unit Cost	524291
b	Margin Money (10%)	52429
c	Bank Loan (90%)	471862
d	Rate of Interest	12.0%

#### **Repayment Schedule**

<b>Repayment Schedule</b>								Amt in Rs
Year	Bank Loan	Loan O/s Beginning of the Year	Loan O/s End of the Year	Surplus	Repayment		Total Outgo	Net Surplus
					Interest	Principal		
Year 1	471862	471862	471862	0	56623	0	56623	-56623
Year 2		471862	393218	212735	56623	78644	135267	77468
Year 3		393218	314574	234008	47186	78644	125830	108179
Year 4		314574	235931	257409	37749	78644	116393	141017
Year 5		235931	157287	283150	28312	78644	106955	176195
Year 6		157287	78644	311465	18874	78644	97518	213947
Year 7		78644	0	342612	9437	78644	88081	254531
<b>Total</b>	<b>471862</b>			<b>1641379</b>	<b>254805</b>	<b>471862</b>	<b>726667</b>	<b>914712</b>
					<b>DSCR =</b>	<b>2.26</b>		

**NOTE-** The expenditure includes capital expenditure and the recurring expenditure for first year

**v) Panjabrao Deshmukh Krishi Vidyapeeth, Akola**

S. No	Component	Unit Cost 2023-24			
1	Crop Loan (70%)	0			
2	Horticulture (25%)	57028			
3	Animal Husbandry (3%)	203361			
4	Others (2%)	6500			
	<b>Total Outlay</b>	<b>266889</b>			
	<b>Margin (10%)</b>	<b>26689</b>			
	<b>Bank Loan (90%)</b>	<b>240200</b>			
Area (In Hectare)	Components	Total Income (1st Year)	Expenditure (in Rs.)		Total Expenditure
			Recurring	Fixed	
<b>Crop Component (70%) Kharif/Rabi/Summer</b>					
0.15	Desi Cotton+Pigeon Pea (5:1) + Geen Gram (1:1)/Cowpea	137281	60802	0	60802 (To be met through KCC)
0.15	Soyabean+Finger millet (1:1)/Chickpea/Cowpea				
0.15	Maize+Mesta (2:1) and Fenugreek+Corainder				
0.05	Sorghum Fodder/Berseem/Cowpea				
0.20	Seasame+Niger+Cluster Bean/Linseed/Cowpea				
<b>0.70</b>	<b>Total</b>	<b>137281</b>	<b>60802</b>	<b>0</b>	<b>60802</b>
<b>Horticulture Component (25%)</b>					
<b>0.25</b>	Custard Apple+Drumstick (3mx3m)	<b>92091</b>	42028	15000	57028
<b>Animal component (3%)</b>					
<b>0.03</b>	Goat + Poultry + PDKV Compost	<b>132335</b>	48361	155000 (Goat Shed - 100000 + Poultry Shed - 50000 + Vermibed - 5000)	203361
<b>Others (2%)</b>					
<b>0.02</b>	Kitchen Garden + Boundary Plantation (Glyricidia / Karonda / Hybrid Napier)	<b>11386</b>	6500	0	6500
<b>1.00</b>	<b>TOTAL</b>	<b>235812</b>	<b>96889</b>	<b>170000</b>	<b>266889</b>

<b>Economics</b>								
S.No.	Particulars	1 Yr	2 Yr	3 Yr	4 Yr	5 Yr	6 Yr	7 Yr
i	Costs (1st year Recurring + Fixed)	266889	106578	117236	128959	141855	156040.7	171645
ii	Income	235812	259393	285333	313866	345252	379777.6	417755
iii	Net Income	-31077	152815	168097	184907	203397	223737	246111
iv	Discount Rate (15%)	0.87	0.76	0.66	0.57	0.50	0.43	0.38
v	Discounted Costs	232077	80588	77084	73733	70527	67461	64528
vi	Discounted Income	205054	196139	187611	179454	171651	164188	157050
	<b>Internal Rate of Return (IRR)</b>	<b>501.73%</b>						
	<b>Benefit Cost Ratio (BCR)</b>	<b>2.01</b>						
	<b>Net Present Value (NPV)</b>	<b>Rs. 80,971</b>						

<b>Loan Details</b>		
S.No.	Particulars	Amt (Rs)
a	Unit Cost (Total outflow)	266889
b	Margin Money (10%)	26689
c	Bank Loan (90%)	240200
d	Rate of Interest	12.0%

<b>Repayment Schedule</b>							Amt in Rs	
Year	Bank Loan	Loan O/s Beginning of the Year	Loan O/s End of the Year	Surplus	Repayment		Total Outgo	Net Surplus
					Interest	Principal		
Year 1	240200	240200	240200	0	28824	0	28824	-28824
Year 2		240200	200167	152815	28824	40033	68857	83958
Year 3		200167	160134	168097	24020	40033	64053	104044
Year 4		160134	120100	184907	19216	40033	59249	125657
Year 5		120100	80067	203397	14412	40033	54445	148952
Year 6		80067	40034	223737	9608	40033	49641	174096
Year 7		40034	0	246111	4804	40033	44837	201273
<b>Total</b>	<b>240200</b>			<b>1179063</b>	<b>129708</b>	<b>240200</b>	<b>369908</b>	<b>809155</b>
					<b>DSCR =</b>	<b>3.19</b>		

**NOTE-** The expenditure includes capital expenditure and the recurring expenditure for first year

## List of the District Development Managers of Maharashtra

S.No	District	Name of the DDM	MobileNo.	E - mail address
1	Ahmednagar	Shri Vikram B Pathare	7028755522	ahmednagar@nabard.org
2	Akola	Shri Shriram Waghmare	8888882781	akola@nabard.org
3	Amravati	Shri Rajendra B Rahate	8269009950	amravati@nabard.org
4	Aurangabad	Shri Suresh R Patwekar	9575390390	aurangabad@nabard.org
5	Beed	Shri Tatyasaheb L Markad	8668649552	beed@nabard.org
6	Bhandara	Shri Devendra N Hedao	8104974442	bhandara@nabard.org
7	Buldhana	Shri Rohit Gadhe	7972509844	buldhana@nabard.org
8	Chandrapur	Shri Trunal T Fulzele	9168106384	chandrapur@nabard.org
9	Dhule	Shri Abhijeet B Ranjankar	7276223777	dhule@nabard.org
10	Gadchiroli	Shri N V Paunikar	9405843750	gadchiroli@nabard.org
11	Gondia	Shri Avinash Lad	8208487647	gondia@nabard.org
12	Jalgaon	Shri Shrikant K Zambre	8160363418	jalgaon@nabard.org
13	Jalna	Shri Tejal Kshirsagar	7709981977	jalna@nabard.org
14	Kolhapur	Shri Ashutosh Jadhav	9414037647	kolhapur@nabard.org
15	Latur	Shri Pramod S Patil	9089851389	latur@nabard.org
16	Nagpur	Shri Sachin M. Sonone	9805070077	nagpur@nabard.org
17	Nanded	Shri Dileep Damayyavar	8779098545	nanded@nabard.org
18	Nandurbar	Shri Pramod D Patil	9987667891	nandurbar@nabard.org
19	Nasik	Shri Amol Lohakare	9946932508	nasik@nabard.org
20	Osmanabad	Shri Chaitanya Gokhale	9881494520	osmanabad@nabard.org
21	Parbhani / Hingoli	Shri Sunil K Navsare	9425606076	parbhani@nabard.org
22	Pune	Shri Rohan R More	9021804727	ddm.pune@nabard.org
23	Raigad	Shri Pradip S Apsunde	9921504001	raigad@nabard.org
24	Ratnagiri	Shri Mangesh S Kulkarni	9426601865	ratnagiri@nabard.org
25	Sangli	Shri Nilesh D Chaudhari	9769353117	sangli@nabard.org
26	Satara	Shri Rajendra G Chaudhari	9890404589	satara@nabard.org
27	Sindhudurg	Shri Ajay A Thute	9007607414	sindhudurg@nabard.org
28	Solapur	Shri N B Shelke	9906384941	solapur@nabard.org
29	Thane / Palghar	Shri Sudhanshu K Ashwini	9650019511	palghar@nabard.org
30	Wardha	Shri Sushant Patil	7972961846	wardha@nabard.org
31	Washim	Shri Shankar Kokadwar	9423101925	washim@nabard.org
32	Yavatmal	Shri Deepak B Pendam	9907433101	yeotmal@nabard.org
33	Mumbai Sub.	Shri Elangaivendhan A.	8277390537	mumbaisuburban@nabard.org
34	Mumbai City	Shri Senthilvel B	9962256223	mumbaicity@nabard.org



## NABVENTURES Limited

A wholly owned Subsidiary of NABARD

NABVENTURES Ltd, a Company registered under the Companies Act, 2013, with a paid-up capital of INR 25 crore, is the Sponsor and Investment Manager of NABVENTURES Fund-I, a SEBI-registered Category II Alternative Investment Fund (AIF), with a base corpus of INR 500 crore and greenshoe option of INR 200 crore.

**Investment focus:** Start-ups/MSMEs operating in/with

➤ **Sectors:** Agri-tech, rural fin-tech, food-tech, health-tech and edu-tech, with a rural focus

➤ **Stage:** Pre-Series A (INR 5-20 cr.) & Series A (INR 20-50 cr.)

**Model:** asset-light, technology-led models, which can be quickly scaled up across geographies

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➤ **Corpus raised:** INR 598 crore

➤ **Investments made:** INR 148.21 crore in 9 start-ups

**Registered Office:** NABARD, 2nd Floor, A Wing, Plot No. C-24, G Block, BKC, Bandra (East), Mumbai-400051

✉ e-mail: nabventure@nabard.org ☎ Phone: 91-22-26539149 🌐 www.nabventure.in



## NABSAMRUDDHI FINANCE Limited

A Subsidiary of NABARD

"The objective of NABSAMRUDDHI is to provide credit facilities to legal entities for the promotion, expansion, commercialisation and modernisation in non-farm & agri allied activities including microfinance, MSME, housing, education, transport, etc."

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➤ Transport  
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### Corporate Office:

NABARD, Gr. Floor, D Wing, Plot No. C-24, G Block, BKC, Bandra (East), Mumbai-400051

Ph: 022-2653 7091/9693

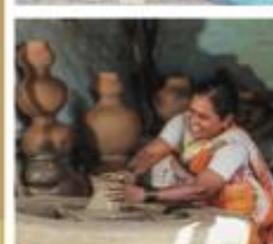
✉ e-mail: nabsamruddhi@nabard.org

### Registered Office:

NABARD, Regional Office 1-1-61, RTC 'X' Road, P.B. No. 1863 Hyderabad-500020, Telangana

Ph: 040-23241155/56

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## NABFOUNDATION

Leveraging the power of convergence

NABFOUNDATION is a wholly owned, not for profit, subsidiary of NABARD, established under Sec 8 of Companies Act, 2013. The organization draws its strength and experience from the thousands of development projects grounded by its parent body, NABARD, in multiple domains over nearly last four decades.

### What does NABFOUNDATION want from you ?

#### IF YOU ARE AN INDIVIDUAL

Reach out to us with your ideas about development projects which you believe need to be implemented. We really look forward to your fresh ideas

#### IF YOU ARE A CSR UNIT

Of a corporate and believe that there is a scope for collaborating with us to have access to the vast network of resources of NABARD in a structured manner, just give us a call

#### IF YOU ARE A CIVIL SOCIETY

#### ORGANIZATION/ NGO

With an idea whose time you think has come and have not been able to find willing partners, reach out to us

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## NABKISAN Finance Limited

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- › 1400+ FPOs credit linked
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- › Financing FPOs through
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- › Soft loans for Agri Startups

### Corporate Office

C/o NABARD, Mumbai

✉ e-mail:corporate@nabkisan.org

☎ Phone:022- 265 39620/26539415

🌐 www.nabkisan.org

### Registered Office

C/o NABARD, Tamil Nadu RO, Chennai

✉ e-mail:finance@nabkisan.org

☎ Phone:044- 28270138/28304658

🌐 Web-portal:krishimanch.co.in



## NABARD Consultancy Services Private Limited [NABCONS]

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ISO-9001:2015 COMPANY

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**CONSULTANCY AND ADVISORY SERVICES**

Pan India Presence with offices in 31 States/UTs

### AREAS OF OPERATION

- › Agriculture & Allied Activities
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- › Horticulture
- › Forestry
- › Corporate Social Responsibility
- › Watershed Development
- › Irrigation & Water Resources
- › Socio-economic Development
- › Natural Resource Management
- › Food Processing
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- › Skills for Livelihood
- › International Business
- › Value Chain Development
- › Infrastructure Monitoring
- › Climate Change

### Registered Office

NABARD, Plot No. C-24, G Block, BKC, Bandra (East) Mumbai-400051, Ph: 022-26539419

✉ e-mail:headoffice@nabcons.in

### Corporate Office

NABARD Tower, 7th floor Rajendra Place, New Delhi - 110125 Ph: 011-25745103/07

🌐 www.nabcons.com



## NABFINS Limited

A Subsidiary of NABARD

- › A Non Deposit taking Systemically Important NBFC – MFI with a vision to become a model MFI in the country
- › 63% of shares held by NABARD, with other shareholders being Government of Karnataka and Public Sector Banks
- › Mission - To be a trusted client centric financial institution advancing hassle free services to the low income households and the unorganised sector
- › The company has a range of financial products and services including financing of SHGs in partnership with NGOs and JLGs directly through its branches
- › Operating across in 16 States of India and touching lives of more than 5.50 lakh households with a commitment towards their socio-economic empowerment and furthering the cause for financial inclusion

**Registered Office:** #3072, 14th Cross, K R Road, Banashankari 2nd stage, Bengaluru - 560 070, Karnataka, India

✉ e-mail: ho@nabfins.org

☎ Phone: 080 2697 0500

🌐 www.nabfins.org



## NABSanrakshan Trustee Private Limited, A wholly owned Subsidiary of NABARD

Building Trust for Rural Prosperity

- › Offers credit guarantee through the Trusts under its Trusteeship
- › Two sovereign Credit Guarantee Schemes offered:
  - › FPO Financing
  - › Under Animal Husbandry Infrastructure Development Fund (AHIDF)
- › Credit guarantee given against the credit offered by the Eligible Lending Institutions registered under the Scheme

### Corporate Office

NABARD, Plot No. C-24, G Block, BKC, Bandra (East) Mumbai-400051

Ph:022-26539243/26539241

e-mail:ho@nabsanrakshan.org