



# Unit cost for Investment Activities in Agricultural and Allied Activities 2024-25

Internal

राज्य – केरल

**State – Kerala and Lakshadweep (UT)**

राष्ट्रीय कृषि और ग्रामीण विकास बैंक

**National Bank for Agriculture and Rural  
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NABARD does not accept any financial liability to anyone using this report for any purpose. The costs and parameters suggested are based on information available with NABARD. All the unit costs are indicative in nature and there may be variations based on field/ local conditions which may be considered while arriving at the actual loan amount.

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## Foreword

State Level Unit Cost Committee (SLUCC) meeting every year is fixing /revising unit costs in respect of all the major investment credit activities under Farm Sector, normally financed by the banking sector, across the state of Kerala. The various unit costs for each financial year are arrived based on the inputs/proposals furnished by various implementing agencies, Govt. line departments, banks and also the information obtained by the Technical Experts of NABARD and District Development Managers (DDMs) in consultation with the Govt. line departments, banks, Commodity Boards and other stakeholders. This exercise enables the SLUCC to arrive at realistic and contemporary unit cost for various activities in the state of Kerala, which is acceptable to all stakeholders.

The SLUCC is considered as a converging point for departments as well as bankers to exchange their views/suggestions on various disciplines under farm sector. The unit costs proposed for the financial year 2024-25 were deliberated and approved by the State Level Unit Cost Committee (SLUCC) consisting of representatives from banks, Govt. line departments etc. in the meeting convened on 28 June 2024 at the Regional Office of NABARD.

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Most often, Banks strictly adhere to the unit cost stipulated by the SLUCC irrespective of the local conditions, viability etc. It is emphasized that the unit costs fixed by the SLUCC are indicative and banks are at liberty to increase or reduce them depending on the local conditions, financial viability, bankability etc., in accordance with the local needs.

I would also like to acknowledge the support and cooperation extended by different Line Departments, Research Institutions, SLBC, Banks, Farmers, Technical officers of NABARD and all others who have contributed to bringing out this Unit Cost booklet. I am sure that the booklet will serve as a ready reckoner to the financing banks, various Government Departments, Development Agencies etc. in identifying and financing of investment activities in agriculture and allied sector in the State. We solicit your suggestion for widening and improving the coverage of the booklet.

**Baiju N Kurup**  
**Chief General Manager**

## Introduction

NABARD had re-started the practice of fixing Unit Costs (UCs) for major activities from 2012-13 with a view to giving a fillip to investment credit under agriculture sector in the State. This year also NABARD has initiated the process of fixing/ finalizing Unit Costs for major agriculture and allied activities in the State. The basic objective of the exercise is to make available, benchmark costs started the practice of fixing Unit Costs (UCs) for major activities during 2012-13 with a view to giving a fillip to investment credit under agriculture sector under various investment activities to financial institutions and line departments and thereby help these agencies in deciding appropriate levels of financing for each activity, which in turn can help obviate "under" or "over" financing. In addition to the above, these Unit Costs also provided an indication of the expected benefits from each activity under ideal conditions. More importantly, the unit cost computations also provide a detailed breakup of various components/ parameters, which influence costs under various activities.

The process of annual revision in Unit Costs is carried out through a consultative process that involves various stakeholders like Banks, Government departments, Farmers and NGOs in the districts of the State through a panel of Technical Officers/members of the Regional Technical Advisory Group identified in NABARD and DDMs in the district.

Keeping the requirements of the stakeholders in view, NABARD, Kerala Regional office, has formulated Unit Costs for major activities under various farm sector activities for FY 2024-25. The Unit Costs were drawn up after detailed discussions with the concerned line departments, commodity boards, consultations with dealers/ vendors engaged in trading agricultural implements/ components, conduct of ground level studies and consultations with farmers in some instances.

Further, the economics for various activities are also worked out to ensure that investments made under such activities with suggested Unit Costs, are financially/economically viable.

It is reiterated that the Unit Cost finalized/ fixed by the SLUCC is only indicative/ illustrative, serving more as a pointer, for bankers and Government agencies engaged in supporting term lending under agriculture and allied activities.

## 1. Water Resources

	Particulars	Specifications	Unit cost (₹/ Ha)	Remarks
1	Dugwell	Dia: 1.5 m, using Depth: 5.0 m (RCC rings)	48500	<ul style="list-style-type: none"> <li>• Repayment period – 11 to 15 years with 11 months gestation period (GP). Suitable for Alluvial formations.</li> <li>• Small land holdings upto 0.4 ha.</li> <li>• Cash crops should be grown at least for one season.</li> </ul>
2	Dug Well	Dia: 2.0 m Depth: 6.0 m (RCC Rings)	66500	<ul style="list-style-type: none"> <li>• Suitable for Alluvial formations.</li> <li>• Land holding should be more than 0.4 ha.</li> <li>• Cash crops should be grown at least for one season.</li> </ul>
3	Dug Well (Hard rock areas)	Dia: 6.0 m Depth: 12.0 m (Thickness of steining - 0.45 m - 3m)	350000	<ul style="list-style-type: none"> <li>• Suitable for land holdings more than 1.0 ha.</li> <li>• Cash crops should be grown at least for one season.</li> </ul>
4	Deepening / Renovation of Wells by excavation (with RCC rings)	Depth: 3.0 m Dia: 3.0 m	25500	<ul style="list-style-type: none"> <li>• Repayment period – 05 years with 11 months' gestation period (GP)</li> </ul>
		Depth: 3.0 m Dia: 2.0 m	21000	
5	Filter Points	Dia: 4.5 inch, Depth: 9.0 m (Filter length 3m)	17000	<ul style="list-style-type: none"> <li>• Small land holdings upto 0.4 ha.</li> </ul>
6	Bore Wells	Dia: 150 mm Depth: 80 m	71000	<ul style="list-style-type: none"> <li>• Repayment period – 11 to 15 years with 11 months' gestation period (GP).</li> <li>• Suitable for Hard rock areas.</li> <li>• Rs.800/m for each additional 1 m depth.</li> </ul>
		Dia: 150 mm Depth: 100 m	85000	

	Particulars	Specifications	Unit cost (₹ Ha)	Remarks
<b>Pumping Systems</b>				
1	Electrical Monoblock	1 hp	14300	<ul style="list-style-type: none"> <li>• Repayment period – 9 years with 11 months' gestation period (GP)</li> </ul>
		3 hp	25500	
		5 hp	29000	
2	Diesel Engines/ Pumpsets	3 hp	28000	<ul style="list-style-type: none"> <li>• Repayment period – 9 years with 11 months' gestation period (GP)</li> </ul>
		5 hp	32000	
<b>Submersible Pumpsets</b>				
1	SPS	3 hp	41000	<ul style="list-style-type: none"> <li>• Repayment period – 09 years with 11 months' gestation period (GP)</li> </ul>
		5 hp	45000	
2	Pump house	2mx2mx2.1m - (with A.C roof and 60 cm x 90 cm ventilation)	30000	
3	Pipeline Distribution system	For well command (per ha)	30000	
4	Storage Tank	3mx3mx1.5 m	30000	
<b>Drip Irrigation</b>				
1	Coconut	8 x 8 m-spacing	31500	<ul style="list-style-type: none"> <li>• Repayment period 10 years including 11 months GP.</li> <li>• Cost norms of Central &amp; State sponsored schemes to be adopted wherever such schemes are in operation.</li> </ul>
2	Banana	1.5 x 1.5 m	97245	
3	Arecanut	2.7 x 2.7m	67500	
4	Mango	10 x 10 m	27500	
5	Vegetables/ Close growing crops	1.2 m x 0.6 m (spacing)	128000	
<b>Sprinkler Irrigation</b>				
1	Tea	Per ha	66000	<ul style="list-style-type: none"> <li>• Repayment period 10 years including 11 months GP.</li> <li>• Cost norms of Central &amp; State sponsored schemes to be adopted wherever schemes are in operation.</li> </ul>

2	Various other crops	Per ha	53000	• Repayment period 10 years including 11 months GP
<b>Others</b>				
1	Small Lift Irrigation schemes	Per ha	87000	Repayment period – 7 to 9 years with 11 months' gestation period (GP)
2	Artificial recharge structures for Open/ B.W (Roof Top type)	Per structure (collection area of about 1000 sq. ft.)	30000	Repayment period – 5 years with 11 months' gestation period (GP)
3	Rain Water Harvesting Structures	Per structure	60000	Repayment period – 5 years with 11 months' gestation period (GP)
4	Solar powered DC surface pump of 2kWp	2 HP	300000	Repayment period – 9 years with 11 months' gestation period (GP)

## Terms & Conditions

### 1. Ground Water Structures

(Construction of dug wells, bore wells and deepening of dug wells)

- Availability of ground water has been assessed for each block in the state/ district and this data should be collected by Banks from Ground Water Dept.
- Bank shall ensure that the ground water development programmes are implemented in 'safe' category blocks. In case of schemes for ground water extraction in 'semi-critical' and 'critical' blocks, it shall ensure that application is submitted along with a favourable technical feasibility study report issued for same by competent authority of State Ground Water Department.

### 2. Spacing of wells

The following minimum spacing to be observed between wells while implementing the scheme.

- Between two dug wells in high range region (Hilly tract) : 75 m
- Between two dug wells/ filter points in midland and coastal area : 100 m
- Between two bore wells : 200 m

### 3. Renovation/ Deepening of Wells

- a) Renovation should cover only deepening (to a maximum of 3 metre) and incidental lining/ erection of rings (if necessary). Construction of parapet wall, plastering of parapet wall, etc. should not be considered for financing.
- b) Only those wells having insufficient water column during summer and need deepening to ensure adequate yield for meeting the water requirement of the crop shall be covered under the programme.
- c) The spacing norms (as indicated at para 2 above) between wells (including wells for drinking purpose) may be adhered to under DoW also.

### 4. Electric Power supply

Before issuing loans for electrical pump set, the bank shall satisfy itself that timely power supply would be available to the beneficiary for operation of the pump set.

### 5. Minimum acreage and sale of water

It is necessary that the beneficiary has certain minimum area of land to be brought under irrigation to ensure financial viability of investment and repayment of loans within the prescribed period.

Structure	Benefiting Area (ha.)
Dug well with Pump set	1.0
Bore well with Submersible pump	1.6

If the beneficiary's own cultivated area is smaller than that which can be irrigated by well/ tube well/ bore well, the bank may advise the beneficiary that he can sell surplus water to other farmers. Income from sale of water, if any, may be reckoned for purpose of viability of investments up to a maximum of 50% of the loan repayment instalment.

### 6. Selection and Installation of Pump sets

- a) The bank shall ensure that the pump sets financed under the scheme are selected and installed as per BIS 10804-2018 or latest edition.

- b) Wherever loan is advanced for replacement of existing pump set by new pump set or for replacement of diesel pump set by electric pump set, the bank shall ensure that there is no change in the HP of the pump set and that the new pump set installed is as per BIS 10804-2018, or latest edition.
- c) Bank shall ensure that the spacing criteria, as stipulated at Para.2 above, are adhered to, for the loans extended for pump sets also.
- d) Wherever loans are advanced for standby pump set, the bank may ensure that the standby unit is also selected as per BIS 10804-2018 and that the loans, both for existing pump set and standby unit, are recovered together within the normal recommended repayment period.
- e) 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 use shall not exceed 1.5 times the HP required for irrigation purpose, subject to a maximum of 10 HP.
- f) In case of second hand pump sets financed under the scheme, if any, the bank shall ensure that the balance serviceable life of the second hand pump set is adequate to cover the repayment period of the loan for pump set.
- g) Capacitors: The electric motor financed should always be provided with a starter and a capacitor matching the motor. The following KVAR rating capacitors are recommended for use:



Below 3 HP	- 1 KVAR
3 HP to 5 HP	- 2 KVAR
5 HP to 7.5 HP	- 3 KVAR

## 7. After-Sales Services

The bank shall ensure that adequate after-sales services and repair facilities are provided by the manufacturers / dealers installing the pump set on beneficiaries' wells and that such service is provided free

of charge during the first year of installation.

Before advancing loans for underground pipelines for distribution system, bank shall verify the invoice order in regard to the quantity and quality of pipes required by the farmer and shall also ensure that the entire length of pipeline for which loans are advanced, are actually laid down.

## 8. Water Lifting Permission

Wherever financing pump sets for lifting water from river/ canal is involved, a letter from the competent authority of the Department/ Agency concerned of the State Govt. permitting the beneficiary to lift water from river/ canal and indicating the period up to which such permission is provided should be obtained and furnished to the financing bank before sanctioning the loan. The bank may ensure that water lifting permission is available for a period which will cover at least three more years longer than the repayment period of such loan sanctioned.

### 1. MICRO IRRIGATION SYSTEMS

#### Drip & Sprinkler Irrigation Systems

1. The bank should ensure that only a technically competent and approved firm or person designs and installs the system at the field level.
2. The installing agency should assess the water requirement of each plant optimum crop geometry, etc. and design the efficient system accordingly. The bank should insist for a field layout map showing the benefiting area and item- wise cost estimate.
3. Availability of design discharge of suitable chemical and physical quality on a long-term basis should be ensured for smooth operation of the system. Water should be free from pollution and suspended particle to avoid chocking in the drips/ emitter nozzles.
4. The installing agency should furnish performance guarantee for the efficient operation of the system for a minimum of 3 years period as also ensure timely and adequate post sales-service for trouble-free working



of the system. The system components to be installed should conform to the BIS Specification.

5. Bank should ensure to safeguard the pipes (main and lateral drips), emitters, etc., against theft, robbery, fire, etc.
6. The bank should carry out periodic monitoring of the implementation and assess the performance of the system at the field level.

### **b. Sprinkler Irrigation**

1. The bank should ensure that adequate water of suitable quality to cover the envisaged area is available at the nearest location. Water should be free from pollution and suspended particle to avoid choking in sprinkler nozzles.
2. The design of sprinkler system for the proposed cropping pattern should be done by a technically competent agency/person taking into consideration the source and availability of water, wind velocity in different seasons, soil conditions, agro-climatic situations, etc. to ensure installation of most economical and efficient system at the farm level.
3. A plan of the area showing field layout and cost estimate of the system should be prepared by the implementing agency and appraised by the bank.
4. The components of the system including pipes should conform to BIS standards.
5. The implementing agency/manufacturers should offer performance guarantee for the operation of the system for a reasonably longer period against any defect either manufacturing/ working or installation. The firm should extend regular post sales service for maintenance.
6. The sprinkler pipes, accessories, motor, etc., should be safeguarded against theft, fire, burglary, etc.
7. The bank should conduct periodic monitoring visits to assess the working performance of the system and take corrective steps, wherever required.



## 2. Land Development

	Activity	Unit cost (₹/ Ha)	
1	Reclamation of waterlogged soils by drainage	181300	
2	Reclamation of Marshy and waterlogged land for Coconut and Banana		
	Depth of Water less than 1.0 m	226400	
	Depth of Water above 1.0 m	906700	
3	On Farm Development in Major/ Minor/ Medium Irrigation Commands		
	Slope of the land - 0.51-1.5%	94700	
	Slope of the land - 1.5-2.5%	146700	
	Slope of the land - 2.5-3.5%	177900	
4	Puertorican type Contour Terrace with stone pitching to Risers / Contour bund	Without quarrying	With quarrying
	Slope of the land - 05.1-10.0	80700	101000
	Slope of the land - 10.1-15.0	98300	123000
	Slope of the land - 15.1-20.0	108400	135500
	Slope of the land - 20.1-25.0	114800	143500
	Slope of the land - 25.1-30.0	119300	149200
5	Extension of Height of old Stone Pitched Contour Bunds	Without quarrying	With quarrying
	Slope of the land - 05.1-10.0	41000	51000
	Slope of the land - 10.1-15.0	49500	61500
	Slope of the land - 15.1-20.0	54000	68000
	Slope of the land - 20.1-25.0	58000	72000
	Slope of the land - 25.1-30.0	60000	75000
6	Earthen Contour Bund		
	Slope of the land - 1.0-05.0	36800	
	Slope of the land - 5.1-10.0	48300	
	Slope of the land - 10.1-15.0	55100	
	Slope of the land - 15.1-20.0	59600	
7	Renovation of Earthen Contour Bund		
	Slope of the land - 1.0-05.0	18400	
	Slope of the land - 5.1-10.0	24100	
	Slope of the land - 10.1-15.0	27600	
8	Bench Terracing	Without Stone Pitching	With Stone Pitching

	Slope of the land - 05.1-10.0	265700	332600
	Slope of the land - 10.1-15.0	319900	400800
9	Contour Trenches & Embankments		
	Slope of the land - 05.1-10.0		23100
	Slope of the land - 10.1-15.0		28900
	Slope of the land - 15.1-20.0		31200
	Slope of the land - 20.1-25.0		33500
	Slope of the land - 25.1-30.0		34700
	Slope of the land - 30.1-35.0		35800
10	Fencing		87500
11	Humus/Clay/Silt application in Coastal Sandy soils for Coconut Rehabilitation		
	0.9 cum / palm for 175 palms per year		67000
	For 3 years		201000

### Terms and Conditions

1. Necessary technical guidance and supervision have to be provided by the banks staff and wherever possible the technical guidance may be made available from the state Soil Conservation Department.
2. The bank should ensure that the contour bunds are constructed as per the specification prescribed by the State Soil Conservation Department.
3. The cost approved in the scheme is for the average slope and loan amount for soil conservation/land development works should be restricted with reference to actual slope of the land.
4. The bank should maintain the details regarding the type of land development work(s) proposed along with cost estimates in individual cases financed under the scheme.
5. The Bank's technical officer along with District Soil Conservation authorities may take up a monitoring study to ascertain whether the soil conservation works have been carried out as per the specifications or not.
6. Banks/Department may entuse farmers to take up agronomical measures on the engineering structures so as to increase their life.
7. Depth of fresh earth filling particularly in areca nut gardens may be ensured through pre and post sanction inspections, so that the exact amount spent on the depth could be provided.
8. While financing for reclamation of marshy and water logged lands,

care may be taken to ensure its end use strictly for agricultural purposes.

9. Details such as contour map, estimate, designs, of structures etc. may be insisted, while financing land development, soil conservation activities in a contiguous area.

10. On farm development/systematic land development works on the irrigated commands may be considered on the outlet/source basis. In the case of contiguous area, separate estimates for the earth works, irrigation/drainage channels, drips etc. may be insisted upon.



### 3. Farm Mechanization

	Activity	Amount (₹)	Remarks
<b>I</b>	<b>TRACTORS</b>		
1	Tractor 15-20 hp	300000 to 450000	Sonalika MM 18, Mahindra Yuvaraj 215NXT, New Holland Simba 20, Eicher 188 etc.
2	Tractor 20-40 hp	715000 to 750000	Mahindra 265 DI, Swaraj 735 FE, Eicher 380, John Deer 5105.
3	Tractor 40-70 hp	1065000 to 1000000	Mahindra 475 D I, Sonalika 745 D I, Swaraj 744 FE, John Deer 5310, New Holland 3630 TX etc.
4	Trailer/Trolley – 2-wheeler hydraulic tipping	85000 to 125000	Up to 3-ton capacity
5	Trailer/Trolley – 4-wheeler hydraulic tipping	150000 to 180000	Up to 5-ton capacity
<b>II</b>	<b>Land Development and Tillage Equipment</b>		
1	Reversible Mould Board Plough	70000 to 105000	2 to 3 furrows
2	Rotavator	120000 to 140000	30-36 blades
3	Cultivator	38000 to 70000	7 to 11 tynes spring loaded
4	Disc Plough	45000 to 70000	2- 3 discs
5	Cage Wheels with Stand and Leveller	55000 to 65000	Tractor mounted
6	Tractor mounted Land Leveler	20000 to 35000	7 to 11 feet
7	2 Bottom Reversible MB Plough cum Ridge	50000 to 65000	Tractor mounted
8	Cage Wheels - 2 Nos.	17500 to 25000	Upto 6 feet width
<b>III</b>	<b>Sowing and Planting equipment</b>		
1	Power operated Heavy Duty Auger	35000 to 38000	
2	Tractor Operated Post Hole Digger	55000 to 70000	

3	Tractor Mounted Bund Former	60000 to 120000	
4	Transplanter – Walk behind 4 rows to 8 rows	250000 to 450000	Mahindra, Yanmar and Kubota
5	Transplanter – 4 wheel, 8 row	1800000 to 1900000	Kubota
6	Transplanter – 4 wheel, 6 row	1300000 to 1405000	Kubota
7	Tractor drawn seed cum Fertilizer Drill	45000 to 75000	9 to 15 tynes
<b>IV</b>	<b>Intercultural equipment</b>		
1	Power Weeder	48000 to 55000	Up to 5 hp
2	Power operated Tiller	170000 to 210000	8 hp and above
3	Garden Tiller	56000 to 60000	Power- 5 to 5.5 hp
4	Tractor/Power tiller Operated Boom Sprayer	55000 to 65000	
5	Portable Power Sprayer	26500 to 30000	Discharge rate of 10 to 16 liter per minutes, Power- 2 to 5 hp
6	Knapsack Sprayer (Power/hand/battery operated)	5000 to 5900	16-liter capacity
7	Agriculture Drone (Medium Category)	650000 to 100000	Drone Price including pilot training and license fee.
8	Bush cutter	24000 to 30000	
<b>V</b>	<b>Harvest and Post Harvest Equipment</b>		
1	Self-Propelled Combined Harvester	2600000 to 2909000	Power - 101 to 130 hp and harvesting capacity of 2-5 acres/hr
2	Tractor Mounted Combined Harvester	1600000 to 2000000	
3	Self-propelled Vertical Conveyer Reaper	105000 to 135000	Power- 5 to 7 hp and harvesting capacity of 1 acre/hr
4	Power Thresher (30 to 45 hp)	150000 to 160000	Threshing capacity of 1500 Kg to 2000 Kg/hr
5	Straw Bailer - Round (Tractor operated)	350000 to 370000	Compatible with 30 to 50 hp

			tractors
6	Coconut Climbing Machine	2750 to 3000	Basic model
		3800 to 5500	Advanced with seating feature and high weight bearing capacity
7	Electric dryer	72000 to 150000	24 trays
		300000 to 395000	48 trays
8	Coconut dehusking machine	125000 to 220000	Capacity of 500 to 1000 nuts per hour
9	Arecanut Dehusker	115000 to 175000	Capacity of 350 to 500 Kg per hour.
10	Cleaner cum Grader	150000 to 225000	200 to 500 Kg capacity
11	Arecanut Climber	10000 to 25000	
12	Rubber Tapping Machine	30000	
13	Rubber Sheeting battery	150000	200 to 300 sheets per hour

### Terms and Conditions

1. The bank shall satisfy itself regarding cost of machine, cost of implements etc. by verification of quotations, invoice and bills.
2. The machinery along with accessories shall be insured against accident risk, risk against fire and theft, covering entire loan period and relevant policy shall be assigned in bank's favour and assignment duly registered with insurance company.
3. The bank may satisfy itself with the selection of capacity of machinery and type of implements, based on estimated operational area of machinery, land holding of borrower, cropping pattern in the area, type of soil etc.
4. Cost norms of Central & State sponsored schemes to be adopted wherever such schemes are in operation.

5. The bank may satisfy itself that infrastructural facilities such as service and repair centers, supply of spare parts, fuel and lubricants are adequate in the area.



6. The bank shall ensure that its supervisory staff undertake visits at periodical intervals and keep a record of their observations on the operation of machinery and implements.

#### 4. Plantation and Horticulture

	Activity	No. of plants/ ha	Unit cost (₹/ Ha)	Remarks
1	Arecanut	1350	845000	
2	Cardamom	1100	660000	Repayment period-08 years with 03 years GP
3	Cashew	175	235750	Repayment period-10 years with 06 years GP
4	Cocoa	400	127000	
5	Coconut (Rainfed)	175	266000	Repayment period-12 years with 07 years GP
6	Coconut (Irrigated)	175	322000	-do-
7	Coffee ( <i>Arabica</i> )	3000	179000	Repayment period-12 years with 05 years GP
8	Mango	175	160000	Repayment period-10 years with 05 years GP
9	Rubber	450	550000	
10	Tea estates	10800	400000	
11	Pepper	1000	225000	
12	<b>Hi-Tech Farming</b>			
12.1	Naturally ventilated poly house	10 cents	592000	
12.2	Rain Shelter house	100 sq.mt.	85000	
13	Rambutan	100	422500	
14	Nutmeg	160	511000	
15	Bee keeping with <i>Cerana indica</i>	25 + 25 colonies	151900	
16	Stingless Bee Culture	10+10 colonies in home steads in forest ecosystem	30800	

## Terms and Conditions

1. While selecting villages / areas for financing, the bank shall ensure compactness of areas to facilitate supervision. The bank may identify suitable areas in consultation with the concerned department of the State Government or Commodity Boards etc., as in the case may be.
2. Loans under the scheme shall be given to those beneficiaries who have assured water supply facilities to irrigate plants in areas where rain-fed cultivation is not possible.
3. Loans shall be issued in respect of investment for raising plants in first year and maintenance in subsequent years till the plant comes to bearing stage. However, where loans are proposed to be availed of, only in the first year of planting and not for its maintenance during the subsequent years, the bank shall satisfy itself that the beneficiaries have their own resources to meet expenditure for maintenance of garden in the subsequent years. The bank shall satisfy itself that the planting materials of the required quantity and quality are procured by beneficiary from reliable sources such as nurseries of Universities or State Government or any other nurseries approved by the concerned department of the State Government etc.
4. The bank shall ensure that the beneficiary observes the following technical norms:
  - a) The pit dug will be of standard size and with recommended spacing and number of plants as indicated by Kerala Agricultural University.
  - b) The pits will be filled with top soil, cattle manure and fertilizers before planting is done.
  - c) Only high yielding recommended varieties should be planted in place of traditional varieties.
  - d) The young saplings will be staked immediately after planting and shade cover provided wherever necessary and irrigated.



- e) Adequate fencing arrangements will have to be provided as per local practices with a view to protecting the garden from cattle and trespassers/wild animals.
  - f) Watering of plantations done during dry months of first 2 to 3 seasons in respect of plants
  - g) The recommended fertilisation and plant protection schedules of Commodity Boards / KAU shall be followed.
  - h) Mixed cropping will be done wherever possible as in the case of coffee, areca nut, coconut, rubber, cocoa and cashew nut especially in the initial years of planting.
  - i) Financing for development of the said plantation shall invariably be combined with development of suitable intercrops.
  - j) The beneficiaries under the scheme will raise intercrops preferably leguminous crops during the first 4 to 5 years so as to improve returns from main investments.
  - k) Adequate shade may be developed for protection of crops like coffee, tea, coconut, cardamom etc., and a minimum number of shade trees will have to be retained per acre. Planting of fast growing trees may also be taken up wherever necessary.
  - l) Proper and adequate soil conservation and drainage arrangements shall be ensured.
  - m) Installation of processing equipment, civil engineering works shall be carried out according to approved plans and designs.
  - n) In case of Hi-Tech farming, relevant technology suitable for the project area / proposed crop is available and the borrower has the capacity to manage the unit.
5. The Bank's staff may provide all necessary technical guidance and supervision. If this is not possible the bank shall satisfy itself that the required technical guidance and supervision is made available by the concerned department of the State Government or Commodity Board etc.
  6. The suggested soil conservation measures such as contour bunding, etc., should be completed before the layout and digging for planting are taken up.
  7. Necessary arrangements should be made for marketing of the produce

so that the beneficiaries get fair prices. Bank shall make necessary tie up arrangements with the concerned marketing agencies for recovering the loan instalments through sale proceeds payable by beneficiaries and for this purpose bank shall enter into necessary agreements with the beneficiaries also wherever possible.

8. The bank shall grant loans to individual beneficiaries based on a case by case appraisal and assessment of the repayment capacity of the borrowers.
9. Working Capital may be issued through KCC as per the revised guidelines of KCC.

## 5. Forestry and Waste Land Development

	Activity	Unit cost (₹/ Ha)
1	Teak	395400
2	Bamboo	248100
3	Mahagony	287400
4	Matti (Ailanthus)	285800
5	Melia Dubia - Pulpwood	278900
6	Melia Dubia - Plywood	189400
7	Solar Fencing for 1 KM	430000
8	Hanging Solar Fencing for 1 KM	910000

### Terms and Conditions

1. While selecting villages / areas for financing, the bank shall ensure compactness of areas to facilitate supervision. The bank may identify suitable areas in consultation with the concerned department of the State Government.
2. Loans shall be issued in respect of investment for raising plants in first year and maintenance in subsequent years till the plant comes to bearing stage. However, where loans are proposed to be availed of, only in the first year of planting and not for its maintenance during the subsequent years, the bank shall satisfy itself that the beneficiaries have their own resources to meet expenditure for maintenance of plantation in the subsequent years.
3. The bank shall satisfy itself that the planting materials of the required quantity and quality are procured by beneficiary from reliable sources such as nurseries of Universities or State Govt. or any other nurseries approved by the concerned department of the State Govt. etc.



4. The bank shall ensure that the beneficiary observes the following norms:
  - i. The size of the pit and spacing may be adopted as per the standard practices prevailing, depending upon the tree species.
  - ii. The pits will be filled with top soil, cattle manure and fertilizers before planting is done.
  - iii. Only high yielding (e.g.: Teak varieties which give high girth of the stem) recommended varieties should be planted in place of traditional varieties.
  - iv. The young saplings will be staked immediately after planting and shade cover provided wherever necessary and irrigated.
  - v. Adequate fencing arrangements will have to be provided as per local practices with a view to protect the plantation from cattle and trespassers/wild animals.
  - vi. Watering of plantations done during dry months of first 2 to 3 seasons in respect of plants.
  - vii. The recommended fertilization and plant protection schedules of State forest department/ KAU shall be followed.
  - viii. Mixed cropping will be done wherever possible as in case of teak and bamboo in the initial years of planting.
  - ix. Financing for development of the said plantation shall invariably be combined with development of suitable intercrops.
  - x. The beneficiaries under the scheme will raise intercrops preferably leguminous crops during the first 4 to 5 years so as to improve returns from main investments.
  - xi. Proper and adequate soil conservation and drainage arrangements shall be ensured.
  - xii. Installation of processing equipment, civil engineering works shall be carried out according to approved plans and designs.
5. The Bank's staff may provide all necessary technical guidance and supervision. If this is not possible, the bank shall satisfy itself that the required technical guidance and supervision is made available by the concerned department of the State Government.
6. The suggested soil conservation measures such as contour bunding

- etc., should be completed before the layout and digging for planting are taken up.
7. Necessary arrangements should be made for marketing of the produce so that the beneficiaries get fair prices. Bank shall make necessary tie up arrangements with the concerned marketing agencies for recovering the loan instalments payable by beneficiaries through sale proceeds and for this purpose bank shall enter into necessary agreements with the beneficiaries also wherever possible.
  8. The bank shall grant loans to individual beneficiaries based on appraisal and assessment of the repayment capacity of the borrowers.
  9. Working Capital may be issued through KCC as per the revised guidelines of KCC.
  10. Bank may ensure that necessary clearances are available from Forest Department and also that Plantations are raised as per prevailing rules and regulations of the Forest Dept.

## 6. Animal Husbandry - Dairy

### I. Cross Bred Cow

	<b>Particulars</b>	<b>2 cows (1+1 unit)</b>	<b>5 cows (3+2 unit)</b>	<b>10 cows (5+5 unit)</b>
	<b>Fixed Capital</b>	(₹)	(₹)	(₹)
1	Cost of animal/s @ ₹6000/litre	120000	300000	600000
2	Transportation cost	2000	3000	6000
3	Cost of shed 65 sq. ft./animal (including calf), ₹400-500/sq. ft.	52000	178750	357500
4	Equipment (Vessels, Milk cans, ropes, Milking machine, chaff cutter etc.)	2000	25000	80000
5	Insurance (@ 4.0 %)	4800	12000	24000
6	Dung pit and Bio gas plant	4000	10000	99990
	<b>Total Fixed Capital</b>	<b>184800</b>	<b>528750</b>	<b>1167490</b>
	<b>Working Capital (1 month)</b>			
7	Feed Cost	15970	39925	79850
8	Electricity & water	100	250	500
9	Health/veterinary care	500	1250	2500
10	Labour charges	0	0	15000
11	Miscellaneous charges	1000	2500	5000
	<b>Total Working Capital (1 month)</b>	<b>17570</b>	<b>43925</b>	<b>102850</b>
	<b>Total (Rounded off)</b>	<b>202000</b>	<b>573000</b>	<b>1270000</b>
	<b>Unit cost (Less shed cost)</b>	<b>150000</b>	<b>394000</b>	<b>913000</b>

### Considerations:

- Cost of animal considered is for cows with calf at foot in peri-parturient period.
- For 2 animal unit, kaccha/ renovation of existing shed at Rs.400/sq. ft is considered while for 5 & 10 animal unit, pucca shed with concrete flooring at Rs.550/sq. ft is considered.
- Cost of chaff cutter considered for both 5 and 10 animal unit while cost of milking machine is considered for only 10 animal unit.

- Cost of chaff cutter considered is Rs.20000 which is also available from Rs.15000 onwards depending on the capacity, quality, and brand.
- Cost of milking machine considered is Rs.50000 which is also available from Rs.27000 onwards depending on the capacity, quality, and brand.
- Cost of dung pit is considered for 2 and 5 animal unit while cost of bio-gas plant at 0.3333 cu mt per animal for 10 animal unit is considered.
- Working capital cost is given for 1 month. Green fodder cultivation - carrying capacity of 4 animals/acre is considered. 2nd batch of animal/s is/are purchased after 6 months.
- Labour cost at Rs.15000 per month is considered for 10 animal unit.
- Additional or subsequent working capital requirements can be met through KCC.
- For capital intensive 10 animal unit, with loan tenor of 6 years and moratorium of 6 months, the project is financially viable and bankable.
- Banks at their discretion, based on the nature of infrastructure proposed in the project and the estimates/quotes obtained, may arrive at the eligible project cost.

## II. Graded Murrah Buffalo

	Particulars	2 Buffaloes (1+1 unit)	5 Buffaloes (3+2 unit)	10 Buffaloes (5+5 unit)
	<b>Fixed Capital</b>	(₹)	(₹)	(₹)
1	Cost of animals (@ ₹70000/animal)	140000	350000	700000
2	Transportation cost	2000	4000	7500

3	Cost of shed 70 sq. ft./animal (including calf), ₹400-500/sq. ft., up to 2 animals kaccha/renovation of existing shed can be done	56000	192500	385000
4	Equipment (Vessels, Milk cans, ropes, Milking machine, chaff cutter etc.)	2000	27000	82000
5	Insurance (@ 4.0 %)	5600	14000	28000
6	Dung pit and Bio gas plant @0.5 cubic ft. per adult animal	4000	10000	99990
	<b>Total Fixed Capital</b>	<b>209600</b>	<b>597500</b>	<b>1302490</b>
	<b>Working Capital (1 month)</b>			
7	Feed Cost	15970	39925	79850
8	Electricity & water	100	250	500
9	Health/veterinary care	500	1250	2500
10	Labour charges	0	0	15000
11	Miscellaneous charges	1000	2500	5000
	<b>Total Working Capital (1 month)</b>	<b>17570</b>	<b>43925</b>	<b>102850</b>
	<b>Total (Rounded off)</b>	<b>227000</b>	<b>641000</b>	<b>1405000</b>
	<b>Unit cost (Less shed cost)</b>	<b>171000</b>	<b>449000</b>	<b>1020000</b>

### Considerations:

- Cost of animal considered is for buffaloes with calf at foot in peri-parturient period.
- For 2 animal unit, kaccha/ renovation of existing shed at Rs.400/sq. ft is considered while for 5 & 10 animal unit, pucca shed with concrete flooring at Rs.550/sq. ft is considered.
- Cost of chaff cutter considered for both 5 and 10 animal unit while cost of milking machine is considered for only 10 animal unit.

- Cost of chaff cutter considered is Rs.20000 which is also available from Rs.15000 onwards depending on the capacity, quality, and brand.
- Cost of milking machine considered is Rs.50000 which is also available from Rs.27000 onwards depending on the capacity, quality, and brand.
- Cost of dung pit is considered for 2 and 5 animal unit while cost of bio-gas plant at 0.3333 cu mt per animal for 10 animal unit is considered.
- Working capital cost is given for 1 month. Green fodder cultivation - carrying capacity of 4 animals/acre is considered. 2nd batch of animal/s is/are purchased after 6 months.
- Labour cost at Rs.15000 per month is considered for 10 animal unit.
- Additional or subsequent working capital requirements can be met through KCC.
- For capital intensive 10 animal unit, with loan tenor of 7 years and moratorium of 6 months, the project is financially viable and bankable.
- Banks at their discretion, based on the nature of infrastructure proposed in the project and the estimates/quotes obtained, may arrive at the eligible project cost.

### III. Male Buffalo Calf rearing

	Particulars	1 buffalo calf	2 buffalo calves	5 buffalo calves	10 buffalo calves
	Fixed Capital	(₹)	(₹)	(₹)	(₹)
1	Cost of animal (6 month old)	13000	26000	65000	130000
2	Transportation cost	750	1000	2000	3500
3	Shed 35 sq. ft./animal, ₹400-500/sq. ft., upto 4 animals kaccha/ renovation of existing shed can be done	12250	24500	87500	175000
4	Equipment (Ropes, rings, chaff cutter etc.)	300	600	1500	3000

5	Insurance (@ 4.0 %)	520	1040	2600	5200
6	Dung pit and Bio gas plant	1500	3000	7000	75000
	<b>Total Fixed Capital</b>	<b>28320</b>	<b>56140</b>	<b>165600</b>	<b>391700</b>
	<b>Working Capital (8 months)</b>				
7	Feed Cost	20002	40003	100008	200017
8	Electricity & water	375	750	1875	3750
9	Health/veterinary care	250	500	1250	2500
10	Labour charges	0	0	0	0
11	Miscellaneous charges	500	1000	2500	5000
	<b>Total Working Capital</b>	<b>21127</b>	<b>42253</b>	<b>105633</b>	<b>211267</b>
	<b>Total (Rounded off)</b>	<b>49000</b>	<b>98000</b>	<b>271000</b>	<b>603000</b>
	<b>Unit cost (Less shed cost)</b>	<b>37000</b>	<b>74000</b>	<b>184000</b>	<b>428000</b>

### Considerations:

- For 1 & 2 animal unit, kaccha/ renovation of existing shed at Rs.350/sq. ft is considered while for 5 & 10 animal unit, pucca shed with concrete flooring at Rs.500/sq. ft is considered.
- Based on the requirement of project, cost of chaff cutter may be considered for 5 and 10 animal unit.
- Cost of dung pit is considered for 1, 2, and 5 animal unit while cost of bio-gas plant at 0.25 cu mt per animal for 10 animal unit is considered.
- Considering male calves purchased at 6 months of age and slaughter age of 12-14 months, working capital cost is given for 8 months.
- Green fodder cultivation - carrying capacity of 6 animals/acre. Labour cost is not included which may be considered based on the requirement.
- Additional or subsequent working capital requirements can be met through KCC.
- For capital intensive 10 animal unit, with loan tenor of 5 years and moratorium of 12 months, the project is financially viable

and bankable.

- Banks at their discretion, based on the nature of infrastructure proposed in the project and the estimates/quotes obtained, may arrive at the eligible project cost.

#### IV. Dairy - Composite rearing

	<b>Particulars</b>	<b>1 Milch cow+ 1 Heifer</b>	<b>3 Milch cow+ 2 Heifer</b>	<b>6 Milch cow+ 4 Heifer</b>
	<b>Fixed cost</b>	(₹)	(₹)	(₹)
1	Cost of heifer @₹29000/- per calf)	29000	58000	116000
2	Cost of milch cow	60000	180000	360000
3	Transportation cost	1000	2500	5000
4	Cost of shed @₹400-500/Sq. ft.	40000	145750	291500
5	Equipment	1500	2500	22500
	Insurance - heifer for 1 year @4%	1160	2320	4640
	Insurance - milch cow for 1 year @4%	2400	7200	14400
6	Dung pit and Bio gas plant	3500	8000	89994
	<b>Total Fixed Capital</b>	<b>138560</b>	<b>406270</b>	<b>904034</b>
	<b>Working capital (3 months)</b>			
7	Feed Cost	<b>30100</b>	<b>83615</b>	<b>167230</b>
8	Electricity & water	300	500	750
9	Health/veterinary care	500	1250	2500
10	Labour charges	0	0	0
11	Miscellaneous charges	1000	1500	2000
	<b>Total Working capital (3 months)</b>	<b>31900</b>	<b>86865</b>	<b>172480</b>
	<b>Total (Rounded off)</b>	<b>170000</b>	<b>493000</b>	<b>1077000</b>
	<b>Unit cost (Less shed cost)</b>	<b>130000</b>	<b>347000</b>	<b>786000</b>

#### Considerations:

- Cost of animal considered is for cows with calf at foot in peri-parturient period and heifers at 18-20 months of age.
- For 2 animal unit, kaccha/ renovation of existing shed at Rs.400/sq. ft is considered while for 5 & 10 animal unit, pucca

shed with concrete flooring at Rs.550/sq. ft is considered.

- Cost of chaff cutter at Rs.20000 is considered for 10 animal unit which is also available from Rs.15000 onwards depending on the capacity, quality, and brand.
- Based on the requirement of project, cost of chaff cutter may be considered for 5 animal unit.
- Based on the requirement, cost of milking machine may be considered for 10 animal unit which is available from Rs.27000 onwards depending on the capacity, quality, and brand.
- Cost of dung pit is considered for 2 and 5 animal unit while cost of bio-gas plant at 0.3333 cu mt per animal for 10 animal unit is considered.
- Working capital cost is given for 3 months. Green fodder cultivation - carrying capacity of 4 cows/acre & 6 heifers/acre is considered. 2nd batch of animal/s is/are purchased after 6 months.
- Labour cost is not included which may be considered based on the requirement.
- Additional or subsequent working capital requirements can be met through KCC
- Banks at their discretion, based on the nature of infrastructure proposed in the project and the estimates/quotes obtained, may arrive at the eligible project cost.

### **Other Terms and Conditions**

- (i) The bank shall select villages keeping in view compactness of the area to facilitate supervision and nearness of village to veterinary dispensaries animal breeding centers and milk marketing facilities.
- (ii) The bank shall ensure that a unit of 2 milch animals is financed, each animal is purchased with an interval of about 6 months to ensure continuity in milk production.
- (iii) Animals shall be purchased by a committee comprising a representative of the bank, a qualified Veterinary Surgeon and the beneficiary.
- (iv) The bank shall finance under the scheme only good quality animals preferably freshly calved animals in second or third lactation, yielding an average 8-10 litres of milk per day.

- (v) Immediately after purchase, suitable arrangements for identification of animals by branding, tattooing or ear tagging shall be made. In addition to this, the record of particulars of the animal identification (color, birthmarks etc.) shall be maintained.
- (vi) Whenever loans for cattle shed are not given, the bank shall ensure, before sanction of loan for purchase of milch animals that beneficiary has a cattle shed or facilities to provide shelter or will be able to provide a cattle shed from out of his own resources.
- (vii) The bank shall satisfy itself that suitable and satisfactory arrangements exist for marketing of milk. Such arrangements shall be either be in the nature of organized marketing through milk collection centres or satisfactory outlet for direct sale of milk at remunerative prices.
- (viii) In cases where cross bred/ indigenous cows are financed, the bank shall satisfy itself that breeding service with high quality semen of exotic/ cross bred pedigreed bulls is available at the artificial insemination centres in the scheme area.
- (ix) The animals financed under the scheme shall be insured immediately after the purchase for full value and the insurance documents shall be assigned in favour of the bank. The bank may preferably cover all animals under the same by a long-term master policy.
- (x) Beneficiaries shall be asked to maintain basic records.



## 7. Animal Husbandry – Poultry

### I. Broiler rearing - Deep litter system

	Particulars	250 birds	500 birds	1000 birds
	<b>Fixed cost</b>	(₹)	(₹)	(₹)
1	Cost of shed @ ₹325/sq. ft.	81250	162500	325000
2	Equipment - ₹32/bird	8000	16000	32000
3	Insurance	0	0	0
		<b>89250</b>	<b>178500</b>	<b>357000</b>
	<b>Working capital</b>			
4	Cost of DOC @₹28-35/chick	8750	17500	35000
5	Cost of feed@Rs.42/kg	42000	84000	168000
6	Cost of litter material @₹2-2.5/bird	625	1250	2500
7	Medical expenses @₹5/bird	1250	2500	5000
8	Electricity & water	327	654	1308
9	Labour	0	18000	36000
10	Miscellaneous expenses	1500	2500	4000
	<b>Total Working Capital</b>	<b>54452</b>	<b>126404</b>	<b>251808</b>
	<b>Total (Rounded off)</b>	<b>144000</b>	<b>305000</b>	<b>609000</b>
	<b>Unit cost (Less shed cost)</b>	<b>63000</b>	<b>143000</b>	<b>284000</b>

### II. Backyard poultry - Egg laying

	Particulars	15 birds - Deep litter system	15 birds - Cage system
	<b>Particulars</b>	(₹)	(₹)
	<b>Fixed cost</b>		
1	Cost of DOC ₹30 per bird	450	450
2	Cost of shed @₹250-300/sq. ft.	4875	3094
3	Cost of cages	0	3750
4	Equipment - ₹25/bird	375	375
		<b>5700</b>	<b>7669</b>
	<b>Working capital (up to 22 weeks)</b>		
5	Feed cost		
	Chick and grower phase (up to 22 weeks, 8.5 kg, Rs.28)	4335	4335

6	Cost of litter material @₹15/bird	225	0
7	Electricity & water	300	300
8	Medical expenses	500	500
9	Labour	0	0
10	Miscellaneous	500	500
	<b>Total Working capital (up to 22 weeks)</b>	<b>5860</b>	<b>5635</b>
	<b>Total (Rounded off)</b>	<b>11600</b>	<b>13300</b>
	<b>Unit cost (Less shed cost)</b>	<b>7000</b>	<b>6000</b>

### III. Duck Rearing

	Particulars	200 Females and 35 Males	500 Females and 75 Males
		(₹)	(₹)
1	Ducklings – 3 months age at ₹150/- each	35250	86250
2	Portable enclosures	2500	5000
3	Feeding equipment	1500	2500
4	Concentrate feed @ 4.5 Kg/Bird @ ₹35/Kg.	37013	90563
5	Veterinary aid, transportation and other expenses	2000	2500
	<b>Total (Rounded off)</b>	<b>78000</b>	<b>187000</b>

### IV. Duck Nursery (5000 Ducks)

	Particulars	Amount (₹)
1	Day old ducklings @₹25/duckling	125000
2	Portable enclosures	25000
3	Feeding equipment	5000
4	Shed - 3 silpolin sheets	11000
5	Fibre Boat	15000
6	Concentrate feed	68750
7	2 labours @ ₹500/- per day per person for 60 days	60000
8	Veterinary aid, transportation and other expenses	5000

	<b>Total (Rounded off)</b>	<b>315000</b>
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### V. Micro Cage Broiler (100 Birds)

	<b>Particulars</b>	<b>Amount (₹)</b>
	<b>Fixed Cost</b>	
1	Cost of shed @Rs.325/Sq ft	19500
2	Cost of cage (single tier 0.5 sq.ft/ bird)	25000
3	Cost of equipment @ Rs.25/bird	2500
4	Insurance cost	0
	<b>Total Fixed Cost</b>	<b>47000</b>
	<b>Working capital</b>	
5	Cost of DOC @Rs.28-35/per bird	3500
6	Cost of feed (4 Kg/bird @ Rs.42/Kg)	16800
7	Medical expenses	1000
8	Electricity & water	200
9	Miscellaneous	2000
	<b>Total Working Capital</b>	<b>23500</b>
	<b>Total (Rounded off)</b>	<b>71000</b>
	<b>Unit cost (Less shed cost)</b>	<b>51000</b>

### VI. Quail rearing (100 birds) - layer

	<b>Particulars</b>	<b>Cage system (₹)</b>	<b>Deep litter (₹)</b>
	<b>Fixed cost</b>		
1	Cost of Chick	700	700
2	Cost of litter material	0	65
3	Cost of cages	4000	0
4	Cost of shed @Rs.400-450/sq. ft.	7520	12105
5	Cost of equipment (Feeder, waterer, brooder)	1000	1000
		<b>13220</b>	<b>13870</b>
	<b>Working capital</b>		
6	Feed cost		
6.1	Upto 7 weeks	3120	3120
6.2	8-32 weeks	21000	21000
7	Cost of medicines	200	200
8	Electricity cost	626	626

9	Miscellaneous cost	250	250
	<b>Total Working Capital</b>	<b>25196</b>	<b>25196</b>
	<b>Total (rounded off)</b>	<b>38000</b>	<b>39000</b>

### VII. Quail rearing (100 birds) – Meat production

	Particulars	Cage system (₹)	Deep litter (₹)
	<b>Fixed Cost</b>		
1	Cost of chick	900	900
2	Cost of litter material	0	65
3	Cost of cages	4000	0
4	Cost of shed @Rs.400-500/sq. ft	7520	12105
5	Cost of equipment	1000	1000
	<b>Total Fixed Cost</b>	<b>13420</b>	<b>14070</b>
	<b>Working Capital</b>		
	Insurance Cost	0	0
	Feed cost	2000	2000
	Cost of medicines	200	200
	Electricity Cost	72	72
	Miscellaneous Cost	250	250
	<b>Total Working Capital</b>	<b>2522</b>	<b>2522</b>
	<b>Total (rounded off)</b>	<b>16000</b>	<b>17000</b>

### Terms and Conditions – Chicken rearing

- (i) The Bank shall satisfy itself that firm arrangements are made by beneficiaries for getting regular supply of quality chicks as per schedule from the reputed hatchery, duly protected with prophylactic vaccinations. The Bank should enter into tie-up arrangements with the hatcheries in this regard wherever possible for the continuity of supply.
- (ii) The Bank shall satisfy itself that the beneficiaries observe among others, the following specifications in designing the poultry sheds.



1. The end walls of shed shall face east west direction.
  2. The floor level shall be about 1 foot above ground level.
  3. A minimum overhang of 3-5 feet be given to the roof to avoid entry of rain water inside the shed.
  4. The shed shall be made rat proof using wire nets.
  5. In case of cage system, feeding space of 4" and watering space of 2" per bird shall be ensured. Preferably 'A' type design may be explained to the borrowers.
- (iii) The Bank shall disburse loans after satisfying itself that there are adequate facilities for veterinary aid and marketing.
- (iv) During periodical inspection, the bank shall satisfy itself about the following requirements:
1. Utmost cleanliness and hygienic conditions are maintained in the poultry farm. The houses are cleaned and disinfected before housing new flock.
  2. In Deep litter system, fresh, clean and dry litter material such as saw dust, paddy husk, groundnut husk is placed on the floor of the poultry house before poultry birds are introduced in the shed. The litter is kept clean and dry by turning it at least once a week.
  3. Balanced concentrated feed is available to the birds.
  4. Fresh and clean water is available and cleaned at least twice daily
- (v) Loan component in case of chicks, feed etc. shall be disbursed in kind and direct payment shall be made to the suppliers.
- (vi) Loan for construction of sheds shall be made in two instalments and within three months after disbursement of each instalment, utilization shall be verified invariably in all cases.
- (vii) Before disbursement of loan, beneficiaries shall be exposed to a short course of elements of broiler/ layer/ back-yard poultry rearing and management, if adequate experience is not available.
- (viii) Every unit shall exhibit a small board indicating the financing bank to avoid double financing.
- (ix) Beneficiaries shall be asked to maintain basic records.
- (x) Repayment period of loan will depend on the nature of activity and may vary between 5-9 years including grace period from 6 months to 1 year.
- (xi) Wherever possible, the beneficiaries shall be helped to get their

sheds/ birds insured. The option for insurance of poultry birds (layer or broiler) could, however, be left to the borrower.

- (xii) Too many units in a concentrated area may be avoided which may affect marketing prospects and price of the products.
- (xiii) Bank may ensure that a proper marketing arrangement has been made for the marketing of the eggs and meat.

### Terms and Conditions – Duck Rearing

- i) The bank shall satisfy itself that firm arrangements are made by beneficiaries for getting supply of high quality ducklings from a reputed hatchery.
- ii) The bank shall disburse loans after satisfying that there are adequate facilities for veterinary aid and marketing of chicks (in the case of hatchery schemes)/eggs/culled birds.
- iii) During periodical inspections, the bank shall satisfy itself about the following requirements.
  1. Utmost cleanliness and hygienic conditions are maintained in the rearing farm. The houses are cleaned and disinfected before housing new flock.
  2. Balanced concentrate feed is always available to the birds.
- iv) The bank shall undertake a monitoring study regarding implementation of the scheme one year after commencement of sanction of loans under the scheme.
- v) Before disbursement of loan, beneficiaries shall be exposed to a short course on elements of duck rearing.
- vi) A collective arrangement shall be made to buy feed or medicine in bulk to reduce the cost, wherever possible.
- vii) Every unit shall exhibit a small board indicating the financing bank to avoid double financing.
- viii) Beneficiaries shall be asked to maintain basic records.



- ix) An undertaking from the beneficiary may be obtained to remit the loan instalments in time through the branches at places where the birds are maintained, after migration.
- x) As far as possible day old ducklings should only be purchased/reared.

## 8. Animal Husbandry – Goat, Piggery, and Rabbit

### I. Goat rearing

	Particulars	3 does	5 does	10 +1 Unit	19+1 Unit	100+5 Unit
	Fixed cost	(₹)	(₹)	(₹)	(₹)	(₹)
1	Cost of does (15-18 months of age)	33000	55000	110000	209000	1100000
2	Cost of Buck (1-1 1/2 years of age)	0	0	14000	14000	70000
3	Transportation cost	750	750	1500	3000	8000
4	Cost of shed including feeder & waterer - Conventional type - Adult	11298	18830	50470	72312	377700
5	Cost of shed including feeder & waterer - Conventional type - Young ones	15050	27090	54180	87720	464400
6	Equipment (ropes, rings, etc)	600	1000	2000	3500	6000
7	Chaff cutter	0	0	0	20000	42000
8	Insurance @ 5% per year	1650	2750	5500	10450	55000
9	Dung pit	1000	2000	3800	7500	25000
		<b>63348</b>	<b>107420</b>	<b>241450</b>	<b>427482</b>	<b>2148100</b>
10	Cost of shed including feeder & waterer - Hi tech - slatted	19368	32280	86520	132572	692450

	floor (plastic crates) - Adult					
11	Cost of shed including feeder & waterer - Hi tech - slatted floor (plastic crates) - young ones	25800	46440	92880	160820	851400
		<b>82168</b>	<b>140220</b>	<b>316200</b>	<b>560842</b>	<b>2849850</b>
12	Cost of concentrated feed					
	For Ram/Buck	0	0	1485	1485	7425
	For Ewe/Doe	3465	5775	11550	21945	115500
	For Lamb/Kid	3564	6237	12474	23701	124740
13	Cost of green fodder	6750	11250	24750	45000	236250
14	Cost of dry fodder	1094	1823	4010	7290	38273
15	Veterinary	350	600	1275	2350	12375
16	Electricity	900	1125	1350	2700	6750
17	Labour	0	0	0	0	270000
18	Miscellaneous Charges	750	1250	2750	4000	10500
	<b>Total Working Capital</b>	<b>16873</b>	<b>28060</b>	<b>59644</b>	<b>108471</b>	<b>821813</b>
	<b>Total (rounded off) Conventional</b>	<b>80000</b>	<b>135000</b>	<b>301000</b>	<b>536000</b>	<b>2970000</b>
	<b>Total (rounded off) Slatter floor</b>	<b>99000</b>	<b>168000</b>	<b>376000</b>	<b>669000</b>	<b>3672000</b>
	<b>Unit cost (Less shed cost)</b>	<b>69000</b>	<b>116000</b>	<b>251000</b>	<b>464000</b>	<b>2592000</b>

### Considerations:

- Cost of animal considered is for does at last month of pregnancy

and bucks in service.

- Cost of shed is given separately for conventional type and hi-tech slatted floor using plastic crates. In case of wooden slatted floor, 70-80% of given cost may be considered. Cost of shed for conventional type @Rs.300-350/sq. ft and hi-tech slatted floor using plastic crates @Rs.550-600/ sq. ft.
- Cost of chaff cutter at Rs.20000 is considered for 19+1 unit and at Rs.42000 (higher capacity) for 100+5 unit which is also available from Rs.15000 onwards depending on the capacity, quality, and brand.
- With stall fed system of rearing, working capital for 9 months is given. In case of semi-intensive system of rearing, working capital cost can be reduced upto 30% for 100+5 unit (labour cost fully considered) and upto 50% for 3/5/10+1/19+1 units.
- Daily concentrate considered for adults - 150-250 g/animal/day according to physiological stage of the animal.
- Daily concentrate considered for kids - 50-200 g/animal/day according to the stage of growth.
- Green fodder cultivation - carrying capacity of 20 animals incl. kids/acre is considered. Cultivated or locally available dry fodder at 450 g per day per animal including kids is considered.
- Upto 10+1 unit, it can be managed by family members. For 19+1, labour cost may be considered based on the requirement. For 100+5, labour cost (2) at Rs.15000 per month is considered.
- Upto 5 animal unit, service can be done with any male animal available in the village or by Artificial insemination
- Additional or subsequent working capital requirements can be met through KCC
- For capital intensive 100+5 animal unit, with loan tenor of 5 years and moratorium of 12 months, the project is financially viable and bankable.
- Banks at their discretion, based on the nature of infrastructure proposed in the project and the estimates/quotes obtained, may arrive at the eligible project cost.

## Terms and Conditions – Goat rearing

- i. The Bank shall finance under the scheme, only good quality animals of about 6 months to 1 year old.
- ii. Immediately after purchase, suitable arrangements for identification of animals by ear tagging shall be made with the help of District Animal Husbandry Department. In addition to this, the record of particulars of the animal identification (colour, birth marks etc.) shall be maintained.
- iii. The animal financed under the scheme shall be insured immediately after the purchase for full value and the insurance documents shall be assigned in favour of the bank. The bank may preferably cover all the animals under the scheme by a Master Policy of long term.
- iv. Certificate regarding age and health of animals financed shall be obtained from a qualified Veterinary Assistant Surgeon.
- v. Animals shall be got vaccinated against diseases with the help of Veterinary Department.
- vi. The units may be periodically visited by the Veterinary Officer who should maintain a follow up register on maintenance of animals given and young ones produced.
- vii. The animals be stall-fed or grazed with additional concentrate. Hence the Bank should look into the system of rearing and satisfy itself that beneficiaries have suitable arrangements for grazing or ready supply green fodder and concentrate to meet the animal requirements from day 1 onwards.
- viii. Bank shall satisfy itself that adequate facilities for veterinary aid are available from Government Department to the beneficiary in the vicinity of scheme area.
- ix. The implementing agency may be advised to release instalments for veterinary aid, cost of feed etc. only on actual purchase of animal.
- x. Beneficiaries shall be asked to maintain basic records.



- xi. Bank shall also finance either with or without the cost of shed depending on the availability of adequate structures to house the animals purchased.

## II. Pig fattener unit

	<b>Particulars</b>	<b>10 piglets</b>	<b>20 piglets</b>
	<b>Fixed cost</b>	(₹)	(₹)
1	Cost of animals @ one month old	25000	50000
2	Transportation cost	750	1500
3	Cost of shed @₹600/ Sq. ft.	96000	192000
4	Equipment (cans for swill feed, ropes etc.)	1500	3000
5	Insurance	0	0
6	Dung pit and Bio gas plant @0.25 cubic ft. per adult animal	24998	49995
	<b>Total Fixed Capital</b>	<b>148248</b>	<b>296495</b>
	<b>Working capital (6 months)</b>		
	Feed cost		
7	Cost of concentrate @Rs.28-30/Kg, 70% of requirement	67620	135240
8	Cost of swill feed @Rs.4-6 per Kg, 30% of requirement	24840	49680
9	Veterinary aid (vaccination, deworming, castration etc.) @Rs.150 per animal	1500	3000
10	Electricity Charges	900	1800
11	Labour	0	0
12	Miscellaneous Charges	1500	3000
	<b>Total Working Capital</b>	<b>96360</b>	<b>192720</b>
	<b>Total (Rounded off)</b>	<b>245000</b>	<b>489000</b>
	<b>Unit cost (Less shed cost)</b>	<b>149000</b>	<b>297000</b>

### Considerations:

- Cost of animal considered is early weaned piglets at 1 month of age
- Considering slaughtering age of 7 months, working capital is given for 6 months
- Feed - 70% of the requirement from concentrate and 30% of the requirement from swill feed

- Additional or subsequent working capital requirements can be met through KCC
- With loan tenor of 4 years and moratorium of 9 months, the the project is financially viable and bankable.
- Banks at their discretion, based on the nature of infrastructure proposed in the project and the estimates/quotes obtained, may arrive at the eligible project cost.

### III. Pig rearing

	<b>Particulars</b>	<b>10+1 unit</b>
	<b>Fixed cost</b>	(₹)
1	Cost of sows	200000
2	Cost of boar	25000
3	Transportation	2500
4	Cost of farrowing shed @₹600/Sq. ft.	135000
5	Cost of boar shed @₹600/Sq. ft.	39000
6	Cost of shed for dry/ pregnant sows @₹600/Sq. ft.	114000
7	Cost of shed for weaned piglets @₹600/ Sq. ft.	350000
8	Equipment (ropes, teeth clipper, swill feed cans etc.)	2000
9	Insurance	0
10	Bio gas plant	66660
	<b>Total Fixed Capital</b>	<b>934160</b>
	<b>Working capital (7 months)</b>	
11	Concentrate Feed @ Rs.28-30 per Kg.	
	Boar	14700
	Sows	103040
	piglets	370440
12	Cost of swill feed @Rs.4-6 per Kg	130560
13	Green fodder	3500
14	Veterinary aid	2575
15	Electricity & water	1400
16	Labour	105000
17	Miscellaneous expenses	2500
	<b>Total Working Capital</b>	<b>733715</b>
	<b>Total (Rounded off)</b>	<b>1668000</b>

	<b>Unit cost (Less shed cost)</b>	<b>1030000</b>
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### Considerations:

- Cost of animal considered is sows at terminal stage of pregnancy and boars in service.
- Considering slaughtering age of 7 months, working capital is given for 7 months
- Feed - 70% of the requirement from concentrate and 30% of the requirement from swill feed
- Additional or subsequent working capital requirements can be met through KCC
- With loan tenor of 4 years and moratorium of 10 months, the project is financially viable and bankable.
- Banks at their discretion, based on the nature of infrastructure proposed in the project and the estimates/quotes obtained, may arrive at the eligible project cost.

### IV. Pig Breeder unit

	<b>Particulars</b>	<b>10+1 unit</b>
	<b>Fixed cost</b>	(₹)
1	Cost of sows	200000
2	Cost of boar	25000
3	Transportation	2500
4	Cost of farrowing shed @₹600/Sq ft	135000
5	Cost of boar shed @₹600/Sq ft	39000
6	Cost of shed for dry/ pregnant sows @₹600/Sq ft	114000
7	Equipments (ropes, teeth clipper, swill feed cans etc.)	2000
8	Insurance	0
9	Bio gas plant	57137
	<b>Total Fixed Capital</b>	<b>574637</b>
	<b>Working capital (2 months)</b>	
10	Concentrate Feed @ Rs.28-30 per Kg	
	Boar	4200
	Sows	29400
	piglets	31360

11	Cost of swill feed @Rs.4-6 per Kg	16520
12	Green fodder	1000
13	Veterinary aid	2575
14	Electricity & water	400
15	Labour	0
16	Miscellaneous expenses	2500
	<b>Total Working Capital</b>	<b>87955</b>
	<b>Total (Rounded off)</b>	<b>663000</b>
	<b>Unit cost (Less shed cost)</b>	<b>375000</b>

### Considerations:

- Cost of animal considered is sows at terminal stage of pregnancy and boars in service.
- Considering market age of 2 months, working capital is given for 2 months
- Feed - 70% of the requirement from concentrate and 30% of the requirement from swill feed
- Additional or subsequent working capital requirements can be met through KCC
- With loan tenor of 4 years and moratorium of 10 months, the project is financially viable and bankable.
- Banks at their discretion, based on the nature of infrastructure proposed in the project and the estimates/quotes obtained, may arrive at the eligible project cost.

### Terms and Conditions - Piggery

- i) The Bank shall finance under the scheme, the purchase of only good quality piglets of exotic breeds like large white Yorkshire, Landrace etc. in the age group of 1-2 months from reputed farms.
- ii) Bio gas plant should be insisted upon with piggery units.
- iii) Immediately after purchase, suitable arrangements for identification of animals by ear tagging shall be made with the help of District Animal Husbandry Department. In addition to this, the record of particulars of the animal identification shall be maintained.
- iv) The unit shall be insured immediately after the purchase of piglets and the documents assigned in favour of the Bank

- v) Certificate regarding age and health of piglets financed shall be obtained from a qualified Veterinary Assistant Surgeon.
- vi) Animals shall be got vaccinated against diseases like Swine fever etc. with the help of Veterinary Department.
- vii) The units may be periodically visited by the Veterinary Officer who should maintain a follow up register on maintenance of animals given and young ones produced.
- viii) The Bank shall satisfy itself that adequate facilities are available for transporting the garbage to the farm site on regular basis.
- ix) Bank shall satisfy itself that adequate facilities for veterinary aid are available from Government Department to the beneficiary in the vicinity of scheme area.
- x) The Bank shall satisfy itself that adequate marketing arrangements are available for selling the fattened pigs at a remunerative price.
- xi) The Bank shall satisfy itself that the source for procurement of waste for feeding the pigs are already identified by the beneficiaries.
- xii) The implementing agency may be advised to release the loan only after construction of the shed.
- xiii) Bank shall also finance, over and above the unit cost, for construction of Bio-gas plant (according to the size of farm) for the proper waste disposal from the piggery farm.
- xiv) The implementing agency may be advised to release instalments for veterinary aid, cost of feed etc. only on actual purchase of animal.
- xv) During periodical inspection, the bank shall satisfy itself that utmost cleanliness and hygienic conditions are maintained in the piggery farm.
- xvi) Beneficiaries shall be asked to maintain basic records.

## V. Rabbit Rearing

	Particulars	10+2 Unit	20+4 Unit
	<b>Fixed cost</b>	(₹)	(₹)
1	Cost of does (6-12 months old)	10000	20000
2	Cost of bucks (1 year old)	2400	4800

3	Cost of shed (cage rearing within the shed)	20000	30000
4	Cages for buck and does ₹1000/adult	12000	24000
5	Cages for bunnies ₹1500/pen	15000	30000
6	Equipment - buck and does @ ₹75/animal	900	1800
7	Equipment - young ones @ ₹250/pen	2500	5000
8	Insurance	0	0
	<b>Total Fixed Capital</b>	<b>62800</b>	<b>115600</b>
	<b>Working capital (4 months)</b>		
	Concentrate @ Rs.34/kg- adult	9792	19584
	Roughages - adult	576	1152
	Concentrate @ Rs.34/kg- young ones after weaning	21420	42840
	Roughages - young ones	840	1680
	Electricity & water	1000	1400
	Medicines and other expenses @ Rs.50 per adult animal	600	1200
	Medicines and other expenses @ Rs.25 per young animal	1750	3500
	Labour	0	40000
	<b>Total Working Capital</b>	<b>35978</b>	<b>111356</b>
	<b>Total Rounded off to</b>	<b>99000</b>	<b>227000</b>
	<b>Unit cost (Less shed cost)</b>	<b>52000</b>	<b>143000</b>

## 9. Silage Production Unit – Medium Scale

	Particulars	Cost	Remarks
	Fixed cost	(₹)	(₹)
1	Shed for machineries	70000	Covered area for tractor, trolley, baler, transporting truck
2	Labour & storage room	90000	Storage of baling film & others. Residing place for labours.
3	Storage area	60000	Open concrete floor
4	Tractor	750000	45-50 HP tractor
5	Trolley	250000	For transporting harvested fodder
6	PTO operated chaff cutter	150000	Shivashakti Agritech, Viswakarma Engineering, Saral Agro Pvt. Ltd.
7	Baler	1050000	Cornext MSB 500 (semi-automatic)
8	Transporting vehicle	2100000	Bharat Benz 2623R for distribution
9	Office and accessories	100000	Room, furnitures, system etc.
	<b>Total Fixed Capital</b>	<b>4620000</b>	
	<b>Working capital (4 months)</b>		
10	Maize fodder		On field procurement at Rs.2.1/kg. Operational on 245 days in a year i.e. 67%. 19 MT at 8 hrs of operations in a day.
11	Baling film		Cornext baling film @ Rs.875 per ton
12	Labour		"Harvesting – 10 Loading & transporting – 3 Baling – 3 Office personnel & sourcing – 1 Distribution - 2 Cost vary from Rs.600-1000/day
13	Fuel		Harvester, transporting, and distribution
14	Electricity		Baler and office
15	Service & maintenance		

	<b>Total Capital</b>	<b>2302339</b>	
	<b>Working Capital</b>	<b>6922339</b>	
	<b>Unit cost</b>	<b>6922339</b>	

### Other Conditions:

- Project will commence operations from 2 months of sanction
- Operational days is 245 days in a year i.e. 67%. In the 1st year, 180 operational days are considered.
- Operational cycle of 45 days is considered. Working capital is given for one cycle with 67% of operational days. 30-45 days for silage production and 7-15 days for delivery on credit.
- Harvesting is done manually. The harvested fodder is transported in tractor trolley which is chaffed at the production site with PTO operated chaff cutter and baled using the mini silage baler. The bales are kept on the open concrete floor till it becomes silage and transported to farms using a truck.
- Production capacity - 19 MT/day (8 hrs).
- Sale price of silage - Rs.6/kg
- With tenor of 4 years with moratorium of 6 months at RoI of 10.5%, the project is financially viable and bankable.



## 10. Fisheries Development

### A. Freshwater fisheries

	Particulars	Specificati on/ Unit Size	Amount (₹)
<b>1</b>	<b>Country boat for fishing</b>		24000
<b>2</b>	<b>Composite fish culture – New pond</b>	1 Ha	
<b>i</b>	<b>Capital cost</b>		
	Construction of pond including digging, bund construction and compaction (using earth moving equipment)		200000
	Sluice/pipes		10000
	Diesel pump set (5 HP)		30000
	Store Room/pump room		25000
	Nets, cage. Happa and other implements		40000
	Total Capital cost (A)		305000
<b>ii</b>	<b>Recurring cost for one crop</b>		
	Lime	500 kg	6000
	Single Super Phosphate	250 kg	2250
	Urea	125 kg	1125
	Cow dung	6 T	24000
	Fish Seed Catla (2000), Rohu (1500) and Mrigal (1500) – advanced fingerlings	5000 Nos	3000
	Fish feed	3750 kg	120000
	Charges for pumping, harvesting, miscellaneous etc.		25000
	Total Recurring Cost (B)		181375
	<b>Unit Cost (A)+(B)</b>		<b>486375</b>
	<b>Rounded off</b>		<b>486000</b>
<b>3</b>	<b>Fresh water Prawn farming in Ponds</b>	1 Ha	
<b>i</b>	<b>Capital cost</b>		
	Earth work-excavation*		260000
	Sluice gates	15000x2	30000
	Pumpset	5 HP	30000
	Watchman shed/Feed store		50000
	Miscellaneous		10000
	Total capital cost (A)		380000
<b>ii</b>	<b>Recurring cost for one crop</b>		
	Lime	300 kg	3600
	Cow dung	2 ton	8000
	Inorganic fertilizer	75 kg	1125

	<b>Particulars</b>	<b>Specificati on/ Unit Size</b>	<b>Amount (₹)</b>
	Prawn seed	50000	40000
	Feed	1800 kg	90000
	Pumping charges		10000
	Watch & ward	5 months	30000
	Harvesting charges		8000
	Total recurring cost (B)		190725
	<b>Unit Cost (A+B)</b>		<b>571000</b>
	*Mechanical excavation		
<b>4</b>	<b>Paddy cum Fish farming (with coconut &amp; banana)</b>	1 Ha+100 coconut+160 banana	
<b>i</b>	<b>Capital cost</b>		
	Strengthening of bunds	400 cum	91200
	Construction of nursery bund	150 cum	34200
	Sluice gate	1	8000
	Net & Miscellaneous		2000
	Total capital cost (A)		<b>135400</b>
<b>ii</b>	<b>Recurring cost for one crop</b>		
	Lime	250 kg	3000
	Cow dung	2 ton	8000
	Fish seed	6000	4800
	Feed	1000 kg	40000
	Harvesting charges		5000
	Cost of cultivation of coconut/banana		10000
	Total recurring cost (B)		70800
	<b>Unit Cost (A+B)</b>		<b>206200</b>
<b>5</b>	<b>Coconut-cum-Prawn farming in existing coconut groves with canals</b>	1 Ha	
<b>i</b>	<b>Capital cost</b>		
	Formation of mounds, bunds	175 mounds 12 bunds 11 trenches	120000
	Sluice gates	2 Nos	15000
	Pumpset		30000
	Net & Miscellaneous		3000
	Total capital cost (A)		168000
<b>ii</b>	<b>Recurring Cost</b>		

	<b>Particulars</b>	<b>Specificati on/ Unit Size</b>	<b>Amount (₹)</b>
	Cost of cultivation of coconut-175 palms*		48000
	Cost of cultivation of banana-350 plants*		30000
	Recurring cost for one crop of prawn (1 <sup>st</sup> crop)		75000
	Total recurring cost (B)		153000
	<b>Unit Cost (A)+(B)</b>		<b>321000</b>
<b>6</b>	<b>Prawn farming in Kole lands</b>	1 Ha	
<b>i</b>	<b>Capital cost</b>		
	Strengthening of bunds	600 cum	136800
	Construction of nursery bund	150 cum	34200
	Sluice gate	1	25000
	Net & Miscellaneous		20000
	Total capital cost (A)		216000
<b>ii</b>	<b>Recurring cost for one crop</b>		
	Pond preparation		10000
	Lime	250 kg	3000
	Cow dung	2 ton	8000
	Inorganic fertilizer	75 kg	1125
	Prawn seed	50000	40000
	Feed	1800 kg	90000
	Harvesting charges		20000
	Total recurring cost (B)		172125
	<b>Unit Cost (A)+(B)</b>		<b>388125</b>
	<b>Rounded off</b>		<b>388000</b>
<b>7</b>	<b>One Paddy One Fish in Kuttanad and Kole areas</b>	1 ha	
<b>i</b>	<b>Capital cost</b>		
	Strengthening of bunds		100000
	Net & Miscellaneous		20000
	Total capital cost (A)		120000
<b>ii</b>	<b>Recurring cost for one crop of fish</b>		
	Pond preparation		5000
	Lime	500 kg	6000
	Cow dung	2 ton	8000
	Inorganic fertilizer		3500
	Fish fingerlings	5000	25000

	<b>Particulars</b>	<b>Specificati on/ Unit Size</b>	<b>Amount (₹)</b>
	Feed	3250 kg	104000
	Harvesting charges		10000
	Total recurring cost (B)		161500
	<b>Unit Cost (A+B)</b>		<b>281500</b>
<b>8</b>	<b>One Paddy One Fish in Kuttanad and Kole padasekharams</b>	100 ha	
<b>i</b>	<b>Capital cost</b>		
	Bund construction for nursery	4800 cum	1104000
	Pump, motor, lighting and accessories		30000
	Bird cover net for nursery		50000
	Watchman shed		15000
	Net & Miscellaneous		20000
	Total capital cost (A)		1219000
<b>ii</b>	<b>Recurring cost for one crop of fish</b>		
	Nursery preparation		10000
	Lime	5000 kg	60000
	Cow dung	60 ton	240000
	Fish seed	300000	180000
	Feed	14000 kg	448000
	Medicines, test etc.		3000
	Harvesting charges		20000
	Total recurring cost (B)		961000
	<b>Unit Cost (A+B)</b>		<b>2180000</b>
<b>9</b>	<b>Re-Circulatory Aquaculture System (RAS)</b>	<b>40 m<sup>3</sup></b> (5m×5m×1.6 m)	
<b>i</b>	<b>Capital Cost</b>		
	Fish tank and bed with polythene lining & bio-fencing with PVC roof sheet and side orchid netting		197132
	Bio filtration with clarifier		17000
	Plumbing and airline		35000
	Electrification		20000
	Water pump (80 w)	2 nos.	16000
	Air pump ( 90 w)	2 nos.	16000
	Inverter (2 KVA) and tubular battery (150 AH)		35000
	Generator (1 KV)		76000

	<b>Particulars</b>	<b>Specificati on/ Unit Size</b>	<b>Amount (₹)</b>
	Water quality test equipment, nets, utensils etc.		7000
	Setting up of tank – labour charges		34400
	Miscellaneous		6468
	<b>Total Capital Cost (A)</b>		<b>460000</b>
<b>ii</b>	<b>Recurring cost for one crop</b>		
	Fish seed – GIFT	4000 nos.	32000
	Vegetable seedlings		2000
	Pellet feed (FCR 1.5:1)	2400 kg	76800
	Fuel & electricity		18000
	Chemicals, probiotics, medicines etc.		5000
	Miscellaneous		6200
	<b>Total recurring cost (B)</b>		<b>140000</b>
	<b>Unit Cost (A+B)</b>		<b>600000</b>
<b>10</b>	<b>Cage Farming of Fish in Freshwater</b>	60 m <sup>3</sup> (2 cages) (4m x 3m x 2.5 m)	
<b>i</b>	<b>Capital Cost</b>		
	HDPE outer and inner cages (4m X 3m X 2.5 m)	2 nos.	48000
	Substitute net cage for exchange and keeping fry	1 no.	11000
	GI pipe, floating materials and other accessories	2 nos.	35000
	Fixing and fabrication of the cage	2 nos.	20000
	Canoe, watchman shed, solar lighting etc.		70000
	Miscellaneous		5000
	<b>Total Capital Cost (A)</b>		<b>189000</b>
<b>ii</b>	<b>Recurring cost for one crop</b>		
	Cost of fish seed	4800 nos.	38400
	Cost of pellet feed (FCR 1.5 : 1)	2800 kg	140000
	Disinfectants, medicines		5000
	Miscellaneous		5660
	<b>Total Recurring Cost (A)</b>		<b>189060</b>
	<b>Unit cost (A + B)</b>		<b>378060</b>
	<b>Rounded off</b>		<b>378000</b>

	<b>Particulars</b>	<b>Specificati on/ Unit Size</b>	<b>Amount (₹)</b>
<b>11</b>	<b>Ornamental Fish Breeding</b>	Models as per NFDB norms	
<b>a)</b>	<b>Ornamental fish breeding -Backyard hatchery</b>		100000
<b>b)</b>	<b>Ornamental fish breeding-Medium scale unit</b>		800000
	Note: Cost is indicative only; actual cost to be based on quotation		
	Above rate is as per the norms of NFDB		
<b>12</b>	<b>Indigenous Catfish Farming in pond</b>	1 Ha	
<b>i</b>	<b>Capital Cost</b>		
	Repair and strengthening of bund		149500
	Bird cover, lighting, bio fencing, rearing cages etc.		90000
	Lighting, electrification		2500
	Water pump (3 HP)		30000
	Cage/pen/happa for nursery rearing		20000
	Miscellaneous including CCTV, weighing machine, water quality testing kit etc.		58000
	<b>Total Capital Cost (A)</b>		<b>350000</b>
<b>ii</b>	<b>Recurring cost for one crop</b>		
	Pond preparation		
	Bleaching powder	300 kg	10500
	Lime	1000 kg	6000
	Dolomite	400 kg	4800
	Manuring	5 ton	40000
	Fish Seed	100000 nos.	450000
	Live fish		8800
	Pellet feed (FCR 1.2:1)	12000 kg	450000
	Fuel & electricity charges		14000
	Miscellaneous		15900
	<b>Total Recurring Cost (B)</b>		<b>1000000</b>
	<b>Unit Cost (A+B)</b>		<b>1350000</b>

13	Murrel seed production	Unit rate (₹)	Quantity	Amount (₹)
<b>A</b>	<b>Infrastructure development cost</b>			
1	Breeding cum rearing pond (4 m dia./4x4 m)	10,000/ no	10 Nos.	1,00,000
2	Broodstock cum Moina culture pond (1000 m <sup>2</sup> )	35,000/ no	1 No.	35,000
3	Rearing tank (5m dia)	15,000/ no	2 No.	30,000
4	Water pump –portable type	25,000/ no	1 No.	25,000
5	Happa (2x2x1.5)	1,500/ no	4 Nos.	6,000
6	Net, utensils		LS	3,000
7	Water supply arrangements		LS	3,000
8	Roofing			17,000
9	Contingency			1,000
	<b>Sub Total (A)</b>			<b>2,20,000</b>
<b>B</b>	<b>Operational cost</b>			
1	Bleaching powder (30% Av. Cl)	35/ kg	50 kg	1,750
2	Agri lime	16/ kg	150 kg	2,400
3	Dolomite	12/ kg	50 kg	600
4	Raw cow dung (or equivalent fertilizer)	5/ kg	600 kg	3,000
5	Mineral and salts			500
6	Live feed inoculums (Moina)		LS	5,000
7	Murrel brood fish	400/kg	50	20,000
8	Murrel advanced fingerling	20/ no	1,000 No.	20,000
9	Live forage fish adult	1/ no	2,000 No.	2,000
10	Extruded pellet feed	90/ kg	75 kg	6,750
11	Chopped trash fish etc.	30/ kg	250 kg	7,500
12	Fuel & electricity charges		LS	3,000
13	Packing material	180/ kg	10 kg	1,800
14	Labour hiring charges	660/ no	8Nos	5,280
15	Contingency			420
	<b>Sub Total (B)</b>			<b>80,000</b>
	<b>Grant Total</b>			<b>3,00,000</b>

	<b>Particulars</b>	<b>Specificat ion/ Unit Size</b>	<b>Amount (₹)</b>
<b>14</b>	<b>Backyard seed production of Murrel</b>	(0.1 million capacity)	
<b>i</b>	<b>Capital Cost</b>		
	Brood stock cum rearing pond (4 m dia., 4x4 m )		20000
	Broodstock cum Moina culture pond (1000 sq. m)		20000
	Forage Fish culture pond (400 sq. m)		12000
	Water pump - portable type		25000
	Cement/FRP tank (1.5 m dia., 0.75 m height)		20000
	Water supply arrangements		3000
	Bird net cover, side nets		10800
	Happa (2x2x1.5m)		6000
	Nets, utensils, breeding substrate, oxygen cylinder etc.		2000
	Miscellaneous		1200
	<b>Total Capital Cost (A)</b>		<b>120000</b>
<b>ii</b>	<b>Recurring cost for one crop</b>		
	Agri. lime, dolomite, bleaching powder, cow dung etc.		6550
	Brood fish	20 kg	10000
	Advanced fingerlings	1000 Nos.	20000
	Live feed inoculum		5000
	Live forage fish	2000 No.	2000
	Pro-biotics	2 litre	400
	Pellet feed	150 Kg	13500
	Chopped trash fish		15000
	Fuel & electricity charges		3000
	Packing materials		1800
	Labour, Miscellaneous		2750
	<b>Total Recurring Cost (A)</b>		<b>80000</b>
	<b>Unit cost (A + B)</b>		<b>200000</b>
<b>15 (a)</b>	<b>Nile Tilapia Farming in Bio-secured Pond</b>	1 Ha	
<b>i</b>	<b>Capital Cost</b>		
	Repair and strengthening of bund		80500

	Particulars	Specificat ion/ Unit Size	Amount (₹)
	Bird cover, lighting, bio fencing, rearing cages etc.		90000
	Electrification		2500
	Water pump (3 HP)		30000
	Aerator (2 HP)	2 nos.	80000
	Labour charges		10560
	Miscellaneous including CCTV, weighing machine, water quality testing kit, etc.		56440
	Total Capital Cost (A)		350000
<b>ii</b>	<b>Recurring cost for one crop</b>		
	Pond preparation		
	Bleaching powder	300 kg	10500
	Lime	1000 kg	6000
	Dolomite	400 kg	4800
	Manuring	5 ton	16000
	Fish Seed	30000 nos.	240000
	Pellet feed (FCR 1.5:1)	18000 kg	900000
	Pro-biotics	20 litres	4000
	Fuel & electricity charges		20000
	Miscellaneous		14700
	Total Recurring Cost (B)		1216000
	<b>Unit cost (A+B)</b>		<b>1566000</b>
<b>15 (b)</b>	<b>Nile Tilapia Farming in Bio-secured Pond</b>	0.5 Ha	
<b>i</b>	<b>Capital Cost</b>		
	Repair and Strengthening of bund		44000
	Bird cover, lighting, bio-fencing, rearing cages, etc.		50000
	Water pump 3 HP		30000
	Aerator 2 HP	1 nos	40000
	Electrification		2500
	Labour		10000
	Misc. CCTV, Testing kit, Weighing balance, etc.		28000
	Total Capital Cost (A)		204500
<b>ii</b>	<b>Recurring cost for one crop</b>		
	Pond preparation		
	Bleaching powder	150 kg	5250

	<b>Particulars</b>	<b>Specificat ion/ Unit Size</b>	<b>Amount (₹)</b>
	Lime	500 kg	3000
	Dolomite	200 kg	2400
	organic Manuring	2.5 ton	8000
	Fish seed	15000 nos.	120000
	Feed (FCR- 1.5:1)	9000 kg	450000
	Fuel & Electricity charges	LS	20000
	Probiotics	10 litres	2000
	Miscellaneous	LS	8000
	Total Recurring Cost (B)		<b>618650</b>
	<b>Unit Cost (A+B)</b>		<b>823150</b>
	<b>Rounded off</b>		<b>823200</b>
<b>16</b>	<b>Pangassius Farming in Bio-secured pond</b>	1 Ha	
<b>i</b>	<b>Capital Cost</b>		
	Repair and strengthening of bund		180000
	Bird cover, lighting, bio fencing, rearing cages etc.		45000
	Water pump (3 HP)		25000
	Aerator (2 HP)	2 nos.	90000
	Total Capital Cost (A)		340000
<b>ii</b>	<b>Recurring cost for one crop</b>		
	Pond preparation		10000
	Bleaching powder	300 kg	6000
	Lime	1000 kg	12000
	Dolomite	400 kg	4800
	Manuring	5 ton	20000
	Fish Seed	25000 nos.	100000
	Pellet feed (FCR 1.1:1)	44000 kg	1408000
	Fuel & electricity charges		20000
	Miscellaneous		20000
	Total Recurring Cost (B)		1600800
	<b>Unit Cost (A+B)</b>		<b>1940800</b>
<b>17</b>	<b>Fresh water fish culture with Biofloc Unit</b>	5 m x 1.5 m	
<b>i</b>	<b>Capital Cost</b>		
	Biofloc tank - 550 GSM ( PVC coated HDPE sheet 5 m dia. & 1.5 m height)		35000

	Particulars	Specification/ Unit Size	Amount (₹)
	Roofing		5600
	Electrification, Plumbing and Aeration		5000
	Air pump (120 -140 litre/min)	2 Nos.	15000
	Generator		20000
	Biofloc cone, water quality testing kit		5000
	Miscellaneous		10000
	<b>Total Capital Cost (A)</b>		<b>95600</b>
<b>ii</b>	<b>Recurring cost for one crop</b>		
	Fish seed	1250 Nos.	10000
	Fish feed (40% protein )	50 Kg	2600
	Fish feed ( 24-32% protein)	450 Kg	20700
	Medicines, Probiotics		1500
	Carbon source ( Maize, rice, wheat, molasses, sugar, jaggery), culture media		5500
	Fuel and electricity charges		5000
	Miscellaneous		15000
	<b>Total Recurring Cost (B)</b>		<b>60300</b>
	<b>Unit Cost (A+B)</b>		<b>156000</b>
<b>18</b>	<b>Homestead Fish Farming</b>	2 cents	
<b>i</b>	<b>Capital Cost</b>		
	Excavation of pond and bund construction	80 cum	18400
	Polythene sheet (>550 micron) and accessories	1 No.	38000
	Water pump 0.5 HP or central drain	1 No.	4000
	Venturi pump	1 No.	10000
	Covering net	5 Kg	1800
	Miscellaneous		1800
	<b>Total Capital Cost (A)</b>		<b>74000</b>
<b>ii</b>	<b>Recurring cost for one crop</b>		
	Fish seed	1000 Nos.	6000
	Fish feed ( for fingerlings )	60 Kg	3000
	Fish feed	1000 Kg	38000
	Probiotic, medicines etc.		2000
	<b>Total Recurring Cost (B)</b>		<b>49000</b>
	<b>Unit Cost (A+B)</b>		<b>123000</b>
<b>19</b>	<b>Fish cum Pig Integrated Farming</b>	1 acre - 10 pigs	99000

	<b>Particulars</b>	<b>Specificat ion/ Unit Size</b>	<b>Amount (₹)</b>
<b>i</b>	<b>Capital cost</b>		
	Construction of pig shed	150 sq.ft	15000
	Improvement/repair of bund		10000
	Net & Miscellaneous		5000
	<b>Total capital cost (A)</b>		<b>30000</b>
<b>ii</b>	<b>Recurring cost-Piggery</b>		
	Cost of piglets	10	12000
	Feed concentrate	900	22500
	Feed hotel waste	200 kg	2000
	Insurance	50	500
	Medicine & Miscellaneous	50	500
	<b>Total recurring cost piggery</b>		<b>37500</b>
<b>iii</b>	<b>Recurring cost-Fish culture</b>		
	Pond preparation & liming		15000
	Fish fingerlings	2500	1500
	Harvesting/watch & ward		15000
	<b>Total Recurring cost fish</b>		<b>31500</b>
	<b>Total recurring cost (B)</b>		<b>69000</b>
	<b>Unit Cost (A+B)</b>		<b>99000</b>
<b>20</b>	<b>Fish-cum-Duck Farming</b>	1 Ha - 300 ducks	
<b>i</b>	<b>Capital cost</b>		
	Construction of duck house	3 sq. ft. x 300	90000
	Improvement/repair of bund		20000
	Net & Miscellaneous		5000
	Feeding equipment's & misc.		1000
	<b>Total capital cost (A)</b>		<b>116000</b>
<b>ii</b>	<b>Recurring cost-Duckery</b>		
	Ducklings	315	31500
	Supplementary Feed	6 kg	36000
	Veterinary aid		1000
	<b>Total recurring cost-duckery</b>		<b>68500</b>
<b>ii</b>	<b>Recurring cost-Fish culture</b>		
	Pond preparation & liming		15000
	Fish fingerlings	6000 Nos.	3600

	Particulars	Specification/ Unit Size	Amount (₹)
	Harvesting/watch & ward		20000
	Recurring cost-fish Total		38600
	Total recurring cost (B)		107100
	<b>Unit Cost (A+B)</b>		<b>223100</b>

<b>Biofloc farming of Vannamei - Unit of 20 m<sup>3</sup></b>				
	Particulars	Unit Rate (₹)	Quantity	Amount (₹)
<b>A. Infrastructure development cost</b>				
1.	Biofloc tank (550 GSM tank of 5m dia.) with provision for nursery rearing	36,000	1 no.	36,000
2.	Roofing			5,600
3.	Electrification/Plumbing/Aeration			5,000
4.	Air pump (120-140 lit/min)	7,000	3 no.	21,000
5.	Generator/Inverter	17,000	1 no.	17,000
6.	Biofloc cone	1,200	1 no.	1,200
7.	Electronic balance, barrel, net			5,000
8.	Contingency			1,200
	<b>Sub Total</b>			<b>92,000</b>
<b>B. Operational cost for fish</b>				
1.	Fish seed (4-6 cm)	4/no.	1250 no.	6,000
2.	Feed	70/kg	500 kg	35,000
3.	Carbon source (wheat flour, jaggery, maize, corn)	50/kg	168 kg	8,400
4.	Medicine, probiotics			1,000
5.	Fuel, electricity charges			2,500
6.	Water quality testing kit			4,000
7.	Contingency			1,100
	<b>Sub Total</b>			<b>58,000</b>
	<b>Grand Total (A+B)</b>			<b>1,50,000</b>
<b>C Operational cost for Vannamei shrimp (optional, if outside CRZ area)</b>				
1.	Seed SPF (PL 12-14)	40/100 no.	8000 no.	3,200
2.	Feed	100/kg	160 kg	16,000

3.	Carbon source (wheat flour, jaggery, maize, corn)	50/kg	50 kg	2,500
4.	Medicine, probiotics			1,500
5.	Fuel, electricity charges			4,000
6.	Water quality testing kit			6,000
7.	Contingency			1,800
	<b>Sub Total</b>			<b>35,000</b>

<b>Biofloc farming of Vannamei - Unit of 50 m<sup>3</sup></b>				
	<b>Particulars</b>	<b>Unit rate (₹)</b>	<b>Quantity</b>	<b>Amount (₹)</b>
<b>A. Infrastructure development cost</b>				
1	Biofloc tank (4 tanks having a total volume of 50 m <sup>3</sup> )			1,10,000
2	Water pump 1/2hp	4,000/ no.	1 no.	4,000
3	Blower (1.5 hp) or equivalent	14,000/ no.	2no.	28,000
4	Generator (2 KV)	84,000/ no.	1 no.	84,000
5	Temporary roofing [Shade net, UV resistant PVC sheet and supporting measures]		LS	25,000
6	CCTV	12,000/ no.	1 no.	12,000
7	Electronic weighing balance (Min 10 kg)	5,000/ no.	1 no.	5,000
8	Biofloc cone			1,200
9	Nets, Utensils	2,000/ set	1 set	2,000
10	Plumbing, airline & air points		LS	12,000
11	Electrification & lighting		LS	12,000
12	Name board (Metal)	4,000/ no.	1 no.	4,000
13	Contingency			800
	<b>Sub Total (A)</b>			<b>3,00,000</b>
<b>B. Operational cost</b>				
1	Vannammei shrimp seed SPF (PL 12-14) @ 400/m <sup>3</sup>	40/100 no.	20000 no.	8,000
2	Feed, 24-32% protein	100/ kg	400 kg	40,000
3	Chemicals, Medicines, Probiotics		LS	3,750
4	Carbon sources	50/kg	125 kg	5,250
5	Fuel & electricity		LS	10,000

6	Water quality test equipment	7,000/ no.	1 no.	6,000
7	Contingency			2,000
	<b>Sub Total (B)</b>			<b>75,000</b>
	<b>Grant total</b>			<b>3,75,000</b>

<b>Biofloc farming of Vannamei - Unit of 160 m<sup>3</sup></b>				
	<b>Particulars</b>	<b>Unit rate (₹)</b>	<b>Quantity</b>	<b>Amount (₹)</b>
<b>A. Infrastructure development cost</b>				
1	Biofloc tank (2-8 tanks having a total volume of 160 m <sup>3</sup> )			1,56,000
2	Water pump 1/2hp	4,000/ no.	1 no.	4,000
3	Blower (2hp) or equivalent	17,000/ no.	3no.	51,000
4	Venturi pump 370 w (470l/m)	8,000/ no.	2 no.	16,000
5	Generator (Automatic 5-7 KV)	2,00,000/ no.	1 no.	2,00,000
6	Temporary roofing [Shade net, UV resistant PVC sheet and supporting measures]		LS	50,000
7	CCTV	12,000/ no.	1 no.	12,000
8	Electronic weighing balance (Min 10 kg)	5,000/ no.	1 no.	5,000
9	Biofloc cone			1,200
10	Nets, Utensils	2,000/ set	1 set	2,000
11	Plumbing, airline & air points		LS	24,000
12	Electrification & lighting		LS	24,000
13	Name board (Metal)	4,000/ no.	1 no.	4,000
14	Contingency			800
	<b>Sub total (A)</b>			<b>5,50,000</b>
<b>B. Operational cost</b>				
1	Vannamei shrimp seed SPF(PL 12-14) @ 400/m <sup>3</sup>	40/100 no.	64000 no.	25,600
2	Feed, 24-32% protein	100/ kg	1000 kg	100,000
3	Chemicals, Medicines, Probiotics		LS	12,000
4	Carbon sources	50/kg	500 kg	25,000
5	Fuel & electricity		LS	28,000
6	Water quality test equipment	7,000/ no.	1 no.	6,000
7	Contingency			3,400
	<b>Sub total (B)</b>			<b>2,00,000</b>

	<b>Grant total</b>		<b>7,50,000</b>
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## B. Brackish Water Fisheries

	<b>Particulars</b>	<b>Specific ation/ Unit Size</b>	<b>Amount (₹)</b>
<b>1</b>	<b>Modified Extensive Shrimp farming</b>	1 Ha	
<b>i</b>	<b>Capital cost</b>		
	Repair and strengthening of bund	1500 cum	210000
	Sluice gate		30000
	Pumpset 5 HP		30000
	Diesel pumpset standby 5 HP		30000
	Watchman shed		20000
	Electrification		10000
	Miscellaneous		20000
	<b>Total Capital cost (A)</b>		<b>350000</b>
<b>ii</b>	<b>Recurring cost for one crop</b>		
	Pond preparation		10000
	Pisciside		8000
	Lime	1000 kg	12000
	Dolomite	400 kg	4800
	Yeast	500 kg	5000
	Cow dung	1 ton	4000
	Probiotics	200 litre	4000
	Shrimp seed	60000	36000
	Feed (FCR 1:1.5)	1950 kg	195000
	Fuel & electricity charges		10000
	Watch & ward		20000
	Harvesting & marketing		20000
	<b>Total recurring cost (B)</b>		<b>328800</b>
	<b>Unit Cost (A+B)</b>		<b>678800</b>
<b>2</b>	<b>Modified Extensive Shrimp farming with zero water exchange</b>	1 Ha	
<b>i</b>	<b>Capital cost</b>		
	Repair and strengthening of bund	1500 cum	210000
	Bird cover, lighting, Bio fencing		25000

	Particulars	Specific ation/ Unit Size	Amount (₹)
	Pumpset 3 HP		25000
	Aerator (2 HP)	2 nos.	90000
	Watchman shed		20000
	Total Capital cost (A)		370000
ii	<b>Recurring cost for one crop</b>		
	Pond preparation		10000
	Bleaching powder	300 kg	6000
	Lime	1000 kg	12000
	Dolomite	400 kg	4800
	Yeast	500 kg	5000
	Probiotics – type A	200 litre	4000
	Probiotics – type B	2725 litre	16350
	Shrimp seed	60000	36000
	Feed (FCR 1:1.5)	1950 kg	195000
	Fuel & electricity charges		10000
	Watch & ward		20000
	Harvesting & marketing		20000
	Total recurring cost (B)		339150
	<b>Unit Cost (A+B)</b>		<b>709200</b>
<b>3</b>	<b>Vannamei Shrimp Farming (Zero water exchange)</b>	1 Ha	
i	<b>Capital cost</b>		
	Repair and strengthening of bund including PE lining & ETP		250000
	Bird cover, lighting, Bio fencing		50000
	Pumpset 5 HP	2 nos.	85000
	Aerator (2 HP)	4 nos.	180000
	Watchman shed, store, pump house, canoe, electrical installation etc.		120000
	Total Capital cost (A)		685000
ii	<b>Recurring cost for one crop</b>		
	Pond preparation		10000
	Bleaching powder	300 kg	6000
	Lime	1000 kg	12000
	Dolomite	400 kg	4800

	<b>Particulars</b>	<b>Specific ation/ Unit Size</b>	<b>Amount (₹)</b>
	Yeast	500 kg	5000
	Probiotics – type A	200 litre	4000
	Probiotics – type B	2725 litre	16350
	Shrimp seed	500000 Nos.	250000
	Seed quality test		4000
	Feed (FCR -1:1.15)	9600 kg	768000
	Fuel & electricity charges		25000
	Watch & ward		20000
	Harvesting & marketing		20000
	Total recurring cost (B)		1145150
	<b>Unit Cost (A+B)</b>		<b>1830200</b>
<b>4</b>	<b>Brackish water Fish Farming</b>	1 Ha	
<b>i</b>	<b>Capital Cost</b>		
	Renovation of pond		150000
	Aerator & accessories	2 nos.	90000
	Pumpset 3 HP		25000
	Watchman shed, pump house, electrical installation etc.		45000
	Cost of cage/happa for rearing fingerlings		40000
	Total Capital cost (A)		350000
<b>ii</b>	<b>Recurring cost for one crop</b>		
	Pond preparation including liming and manuring		10000
	Cost fish seed – Milk fish, Mullet & Pearlspot	5000 nos.	40000
	Supplementary feed	3375 kg	135000
	Electricity charges		10000
	Miscellaneous		5000
	Total Recurring expenses (B)		200000
	<b>Unit Cost (A+B)</b>		<b>550000</b>
<b>5</b>	<b>Cage Farming of Fish in Brackish water</b>	4m x 3m x 2.5m	
<b>i</b>	<b>Capital Cost</b>		

	Particulars	Specific ation/ Unit Size	Amount (₹)
	Cost of cage 1.25" B class pipe one cage frame (4x3x2.5m) and two HDPE outer and inner nets (3x2.5x2m)		50000
	Substitute cage net for exchange	3 set	12000
	Mooring, ballast and floats		40000
	Canoe		25000
	Shed cum store		25000
	Equipment/tools/accessories		21000
	<b>Total Capital Cost (A)</b>		<b>173000</b>
<b>ii</b>	<b>Recurring cost for one crop</b>		
	Cost of fish seed	Sea bass - 300 nos. Pearlspot - 3800 nos.	52800
	Nursery rearing happa		2000
	Cost of feed ( floating feed for pearlspot)	1140 kg	85500
	Cost of feed (trash fish)	1080 kg	27000
	Labour cost for 8 months		0
	Miscellaneous		9700
	<b>Total Recurring Cost (A)</b>		<b>177000</b>
	<b>Unit cost (A + B)</b>		<b>350000</b>
<b>6</b>	<b>Backyard hatchery for Pearlspot – Model I</b>		
<b>i</b>	<b>Capital Cost</b>		
	Construction of tank - 4m X 2m X 1m	4 nos.	84000
	Net, Happa		3000
	Water supply arrangement		3000
	Miscellaneous		2000
	<b>Total Capital Cost (A)</b>		<b>92000</b>
<b>ii</b>	<b>Recurring cost for one crop</b>		
	Brood fish	8 kg	3200
	Fish feed	30 kg	3000
	Medicines, disinfectants		1000

	Particulars	Specific ation/ Unit Size	Amount (₹)
	Miscellaneous		800
	Total Recurring Cost (A)		8000
	<b>Unit cost (A + B)</b>		<b>100000</b>
7	<b>Backyard hatchery for Pearlsport - Model II</b>		
i	<b>Capital Cost</b>		
	Brood stock pond	200 sq m	5750
	Breeding cum nursery rearing pond	400 sq.m	12000
	Cement/FRP tank	2 Nos.	40000
	Water supply arrangements		1500
	Bird net cover, side nets	30 kg	10800
	Happa (2x2c1.5)	10 Nos.	15000
	Nets, utensils, breeding substrate, oxygen cylinder etc.		23000
	Miscellaneous		1950
	Total Capital Cost (A)		110000
ii	<b>Recurring cost for one crop</b>		
	Agri lime, dolomite, bleaching powder, cow dung etc.		2510
	Brood fish	80 kg	32000
	Fish feed inoculums	1200 kg	90000
	Live food (stock solution)		5000
	Packing materials		3600
	Labour, Miscellaneous		6890
	<b>Total Recurring Cost (A)</b>		<b>140000</b>
	<b>Unit cost (A + B)</b>		<b>250000</b>

8.	Pearlsport seed production	Unit (₹)	Rate	Quantity	Amount (₹)
<b>A. Infrastructure development cost</b>					
1	Brood stock pond (500 sq. m.)	17,500/ No.		1 Nos.	17,500
2	Breeding cum nursery rearing pond (1000 sq. m.)	35,000/ No.		1 Nos.	35,000

3	Bird net cover and side net	350/ kg	60 kg	21,000
4	Breeding substrates	50/ No.	160	8,000
5	Cement / FRP tank (IMT)	22,000/ No.	3 Nos.	66,000
6	Water pump	25,000	1	25,000
7	Water supply arrangements		LS	5,000
8	Happa (2x2x1.5)	2,000/ No.	10 Nos.	20,000
9	Nets, utensils		LS	5,000
10	Oxygen cylinder	12,000/ No.	1 Nos.	12,000
11	Contingency			1,500
	<b>Sub Total (A)</b>			<b>2,16,000</b>
<b>B. Operational cost</b>				
1	Bleaching powder (30% Av. Cl)	57/ kg	10 kg	
2	Agri lime	16/ kg	50 kg	
3	Dolomite	12/ kg	30 kg	
4	Raw cowdung	5/ kg	300 kg	1,500
5	Brood fish	600/ kg	80 kg	48,000
6	Fish feed	110/ kg	160 kg	17,600
7	Live food (stock solution)		LS	5,000
8	Packing material	180/ kg	20 kg	3,600
9	Labour hiring charges	660/ No.	8 Nos.	5,280
10	Contingency			1,290
	<b>Sub Total (B)</b>			<b>84,000</b>
	<b>Grant Total</b>			<b>3,00,000</b>

	Particulars	Specific ation/ Unit Size	Amount (₹)
9	Crab culture	0.5 Ha	
i	<b>Capital Cost</b>		
	Pond construction including PE side fencing, bird cover and hide out		120000

	<b>Particulars</b>	<b>Specific ation/ Unit Size</b>	<b>Amount (₹)</b>
	Pump & pipelines	3 HP	25000
	Store, canoe, equipment, electrical installation etc.		30000
	<b>Total capital cost (A)</b>		<b>175000</b>
<b>ii</b>	<b>Recurring cost for one crop</b>		
	Pond preparation		5000
	Crab-lets	5000	100000
	Chopped fish/pellet feed	6250 kg	187500
	Electricity charges, etc.		5000
	Harvesting		5000
	<b>Total recurring cost (B)</b>		<b>302500</b>
	<b>Unit Cost (A + B)</b>		<b>477500</b>
<b>10</b>	<b>Crab culture (Crab fattening Unit)</b>	0.5 Ha	
<b>i</b>	<b>Capital Cost</b>		
	Renovation of Pond including PE side fencing, bird cover and hide out		120000
	Pump & pipelines	3 HP	25000
	Store, canoe, equipment, electrical installation etc.		30000
	<b>Total capital cost (A)</b>		<b>175000</b>
<b>ii</b>	<b>Recurring cost for one crop</b>		
	Pond preparation		5000
	Crab-lets	5000	100000
	Chopped fish/pellet feed	6250 kg	187500
	Electricity charges etc		5000
	Harvesting		5000
	<b>Total recurring cost (B)</b>		<b>302500</b>
	<b>Unit Cost (A+B)</b>		<b>477500</b>
<b>11</b>	<b>Mussel farming</b>	25 sq.m raft 100 m seed length	
<b>i</b>	<b>Capital cost</b>		
	Bamboo poles	16 Nos	2000
	Rope for construction	1.5 kg	360
	Seeding Rope	12 kg	2880

	<b>Particulars</b>	<b>Specific ation/ Unit Size</b>	<b>Amount (₹)</b>
	Contingency		600
	Total capital cost		5840
<b>ii</b>	<b>Recurring cost</b>		
	Cotton netting material	25 m	300
	Nylon rope for attaching sinkers and mussel ropes	1.5 kg	360
	Mussel seed	200 kg	2400
	Canoe hiring	3days	6000
	Labour for seeding	10 days x 600	6000
	Transportation, marketing		5000
	Total recurring cost (B)		14660
	<b>Unit Cost (A+B)</b>		<b>20500</b>
<b>12</b>	<b>Eco friendly Shrimp farming in Pokkali/Kaipad areas</b>	5 ha	
<b>i</b>	<b>Capital Cost (A)</b>		
	Repair and strengthening of bund		1000000
	Sluice gate	2 nos.	200000
	Pumpsets, farm equipment Electrification etc.		120000
	Watchman shed		25000
	Total Capital cost (A)		1345000
<b>ii</b>	<b>Recurring cost</b>		
	Pond preparation		30000
	Shrimp seed	250000 Nos.	150000
	Feed (FCR 1:1.5)	6000 kg	600000
	Fuel & electricity charges		20000
	Watch & ward		20000
	Harvesting & marketing		20000
	Total recurring cost (B)		840000
	<b>Unit Cost (A+B)</b>		<b>2185000</b>
<b>13</b>	<b>Pearlspot Farming</b>	0.2 Ha	
<b>i</b>	<b>Capital Cost</b>		
	Repair and strengthening of bund		16100
	Nets for covering	50 Kg	18000

	<b>Particulars</b>	<b>Specific ation/ Unit Size</b>	<b>Amount (₹)</b>
	Plumbing		12000
	Pen for keeping brood fish		13000
	Water quality testing kits, Name Board, etc.		1940
	Labour charges		3960
	<b>Total Capital Cost (A)</b>		<b>65000</b>
<b>ii</b>	<b>Recurring cost for one crop</b>		
	Bleaching powder	60 Kg	2100
	Lime	100 kg	1200
	Dolomite	80 Kg	960
	Manure	3000 Kg	12000
	Brood fishes (200 gm)	6 Kg	3000
	Fish Seed	1500 Nos.	15000
	Pellet feed (FCR 1.5:1)	1000 Kg	50000
	Miscellaneous		740
	<b>Total Recurring Cost (B)</b>		<b>85000</b>
	<b>Unit Cost (A+B)</b>		<b>150000</b>

Internal

### **Terms and Conditions – Fresh water Fisheries/ Brackish fisheries**

- i) The area shall be inspected/lay out plan prepared by FFDA/MPEDA/Fisheries Department of Government of Kerala and their suitability report obtained before sanction of loans.
- ii) Only good variety of prawn/ fish fingerlings as recommended by MPEDA/FFDA/Fisheries Dept. of Govt. of Kerala shall be grown by the beneficiaries under the scheme.

- iii) The ponds shall be prepared as per the technical guidelines from MPEDA/FFDA/Fisheries Department of Government of Kerala and adequate water level (approximately between 1.0 and 1.5 metres) shall be maintained
- iv) Proper arrangements for desilting, deepening and strengthening of the peripheral bunds shall be made. Sufficient number of sluices shall be provided with proper meshing for efficient management and to prevent entry of predators.
- v) Application of lime/organic and inorganic fertilizers and supplementary feed shall be as per the recommendations of FFDA/State Fisheries Department/MPEDA to ensure optimum prawn/fish production.
- vi) Proper arrangements shall be made to divert flood water away from the area of brackish water culture ponds in order to maintain sufficient salinity.
- vii) Long stalked grass with long blades commonly occurring in intertidal belts and succulent grass shall be planted in the marginal waters to help the production of periphytic diatoms (prawn food) on them and to provide shelter to moulting individuals
- viii) At the time of harvest, arrangement shall be made for marketing, processing and preserving fish/prawn.
- ix) The Marine Product Export Development Authority, Central Marine Fisheries Research Institute, Fish Farmers Development Agency and Fisheries Department of Government of Kerala shall render all necessary assistance to the borrowers for successful implementation of the scheme
- x) The technical officers of the bank shall be assisted by qualified technical staff in Fisheries Discipline, who will be posted by the Director of Fisheries, Government of Kerala.



### C. Marine Fisheries

	Particulars	Specification/ Unit Size	Amount (₹)
<b>1</b>	<b>Country Boat (Catamaran)</b>		
<b>i</b>	<b>Capital cost</b>		
	Catamaran (4 logs)		30000
	Net		20000
	Insurance		1200
	Total Capital Cost (A)		51200
<b>ii</b>	<b>Recurring Cost (for one month)</b>		
	Food expenses		25000
	craft/net repair		10000
	Auction commission		10000
	Total recurring cost (B)		45000
	<b>Unit Cost (A+B)</b>		<b>96200</b>
<b>2</b>	<b>Fibre Glass Catamaran</b>		
<b>i</b>	<b>Capital Cost</b>		
	Catamaran (4 logs)		105000
	Out Board Motor (as per quotation)	9.9 HP	116000
	Net & accessories		30000
	Insurance		8900
	Total Capital Cost (A)		259900
<b>ii</b>	<b>Recurring Cost (for one month)</b>		
	Fuel expenses		35000
	Food expenses		25000
	OBM/craft repair		10000
	Auction commission		10000
	Total recurring cost (B)		80000
	<b>Unit Cost (A+B)</b>		<b>339900</b>
<b>3</b>	<b>Out Board Motor</b>		
	OBM	9.9 HP	150000
	OBM	25 HP	170000
	OBM	40 HP	210000
	Note : Cost is indicative only; actual cost to		

	Particulars	Specific Amount (₹) ation/ Unit Size	
	be based on quotation		
4	<b>Inboard engine 120 to 400 HP</b>		800000 to 1500000
	Note : Cost is indicative only; actual cost to be based on quotation		
5	<b>Marine Plywood canoe (30' OAL)</b>		
i	Marine Plywood canoe	30 ft size	175000
	OBM		125000
	Net & other accessories		150000
	Insurance		12000
	Total Capital Cost ( A )		462000
ii	<b>Recurring Cost ( for one month)</b>		
	Fuel expenses		35000
	Food expenses		25000
	OBM/craft repair		10000
	Auction commission		10000
	Total recurring cost (B)		80000
	<b>Unit Cost (A+B)</b>		<b>542000</b>
6	<b>Fibre glass boat</b>	33 ft	
i	<b>Capital Cost</b>		
	Fibre glass Cattamaram (33' OAL)		200000
	Out Board Motor (as per quotation)	9.9 HP	116000
	Webbings & Accessories		160000
	Insurance		13600
	Total capital cost (A)		489600
ii	<b>Recurring Cost (for one month)</b>		
	Fuel expenses		35000
	Food & Travel expenses		25000
	OBM/craft repair		10000
	Auction commission		10000
	Total recurring cost (B)		80000
	<b>Unit Cost (A + B)</b>		<b>569600</b>
	<b>Rounded off</b>		<b>570000</b>
7	<b>Thanguvallam with inboard engine</b>	70 ft	
i	<b>Capital cost</b>		

	Particulars	Specific ation/ Unit Size	Amount (₹)
	Thanguvallam (70' OAL) - MPC with fibre coating		4000000
	In Board motor ( as per quotation)	280 - 410 HP	3000000
	Webbings (3000 kg) & Accessories		4000000
	Insurance		280000
	Total capital cost (A)		11280000
	<b>Recurring Cost (for one month)</b>		
	Fuel expenses		300000
	Food & Travel expenses		75000
	OBM/craft repair		50000
	Auction commission		50000
	Total recurring cost (B)		475000
	<b>Unit Cost (A+B)</b>		<b>11755000</b>
<b>8</b>	<b>FRP Tuna Longliner</b>		
<b>i</b>	<b>Capital cost</b>		
	FRP craft with insulated fishhold		410000
	Out Board motor (as per quotation)	25 HP	168500
	Webbings and accessories		330000
	GPS, Echosounder, Life jackets		77500
	Insurance		30000
	Total capital cost (A)		1016000
<b>ii</b>	<b>Recurring cost ( for one month)</b>		
	Fuel expenses		35000
	Food & Travel expenses		25000
	OBM/craft repair		10000
	Auction commission		10000
	Total recurring cost (B)		80000
	<b>Unit Cost (A+B)</b>		<b>1096000</b>
<b>9</b>	<b>FRP boat with Choodavala</b>	36 ft	
<b>i</b>	<b>Capital cost</b>		
	FRP craft (36' OAL) with insulated Fishhold		700000
	Out Board motor (as per quotation)	25 HP	168500
	Webbings and accessories		1420000
	Carrier boat with OBM		180000
	Insurance		42000

	<b>Particulars</b>	<b>Specific Amount (₹) ation/ Unit Size</b>
	Total capital cost (A)	2510500
<b>ii</b>	<b>Recurring cost ( for one month)</b>	
	Fuel expenses	175000
	Food & Travel expenses	125000
	OBM/craft repair	25000
	Auction commission	25000
	Total recurring cost (B)	350000
	<b>Unit Cost (A+B)</b>	<b>2860500</b>

### Terms and Conditions - Marine Fisheries

- i.) The bank shall satisfy itself regarding cost of construction of boats, cost of hull, cost of engine and other accessories etc., by verification of quotations, vouchers and bills and that the equipment so mentioned is actually installed on the boats.
- ii.) Mechanised fishing boats should be registered with DG Shipping through Dept. of Fisheries.
- iii.) The mechanized boats accessories shall be insured against marine risk and risk against fire and theft covering entire loan period and relevant policy shall be assigned in bank's favour and assignment duly registered with Insurance Company.
- iv.) The bank shall satisfy itself that beneficiaries financed under the scheme are conversant with the operation of fishing boats.
- v.) The operational area of boats shall be clearly demarcated by the bank in consultation with the State Fisheries Department in order to ensure proper supervision and monitoring of the operation. The boats may be permitted to shift their operational basis depending upon fishing season only with prior consent of the bank in writing.



- vi.) The bank shall satisfy itself that infrastructural facilities such as supply of ice, cold storage, service stations, berthing facilities, etc., are adequate at the landing centers.
- vii.) The bank shall ensure that its supervisory staff undertake visits at periodical intervals and keep a record of their observations on the operation of boats.
- viii.) The bank shall satisfy itself that technical guidance in the operation of boats, if so needed by the beneficiary, is available from the State Fisheries Department.
- ix.) The bank shall satisfy itself that the arrangements for marketing and processing of fish are satisfactory. Such arrangements shall be reviewed from time to time.



## NABARD CONSULTANCY SERVICES (NABCONS)

*(Wholly owned subsidiary of NABARD)*

EXPERT CONSULTANCY SERVICES AVAILABLE FOR	TESTED EXPERTISE IN
<ul style="list-style-type: none"> <li>➤ Techno-economic feasibility studies and potential surveys</li> <li>➤ Detailed project formulation</li> <li>➤ Techno-economic appraisal of projects for bank financing, Debt restructuring</li> <li>➤ Micro-developmental planning, Investment surveys</li> <li>➤ Conceptualization, design and implementation of developmental programmes / projects in various fields including micro finance</li> <li>➤ Monitoring and Evaluation of the developmental projects and investments</li> <li>➤ International Visitors' Programme/ International Exposure Visits</li> <li>➤ Capacity building and human resource development</li> <li>➤ Conduct Sectoral studies and identification of potentials and perspective plans.</li> <li>➤ Legislative drafting, model laws, documentation of agreements / contracts in development banking and service matters etc.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Minor irrigation/</li> <li>➤ Land development/agronomy Soil conservation/ watershed development/ water management</li> <li>➤ Organic farming</li> <li>➤ Agribusiness/ agri clinics</li> <li>➤ Forestry and waste land development</li> <li>➤ Plantation and horticulture</li> <li>➤ Bio-fuel plant cultivation</li> <li>➤ Farm mechanization, engineering in agriculture</li> <li>➤ Non-conventional sources of energy</li> <li>➤ Bio-technology and hi-tech projects</li> <li>➤ Poultry, dairy, animal husbandry, fisheries(inland and marine) and aqua culture</li> <li>➤ Post-harvest technology for agricultural produce, storage, food processing, cold chain development, market yards</li> <li>➤ Rural industrialization and development of non-farm sector</li> <li>➤ Micro finance, poverty reduction programmes, tribal development, women empowerment and other developmental projects and investments</li> <li>➤ Capacity building through workshops, seminars and training programmes on developmental issues</li> </ul>

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Internal

Internal



**NATIONAL BANK FOR AGRICULTURE AND RURAL  
DEVELOPMENT**

**राष्ट्रीय कृषि और ग्रामीण विकास बैंक  
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