बिहार लाईव स्टॉक डेवलपमेंट एजेंसी,पटना।

बिहार सरकार

ई–मेल– pdblda.pat@gmail.com बेवसाइट–https://state.bihar.gov.in/ahd दूरभाष/फैक्स–0612–2227176

पत्रांकः– बी0एल0डी0ए0–100/2024–1515 पटना–14, दिनांकः– 07/12/2024

प्रेषक,

परियोजना निदेशक,
बी0एल0डी0ए0, पटना।

सेवा में,

आई0टी0 मैनेजर,
पशु एवं मत्स्य संसाधन विभाग,
बिहार, पटना।

विषयः– राष्ट्रीय पशुधन मिशन– एंटरप्रेन्योरशिप डेवलपमेंट प्रोग्राम (NLM-EDP) के तहत विभिन्न योजनाओं का Model-DPR एवं Hyperlink विभागीय Website पर अपलोड करने के संबंध में।

महाशय,

उपर्युक्त विषय के संबंध में कहना है कि केन्द्र प्रायोजित योजना राष्ट्रीय पशुधन मिशन– एंटरप्रेन्योरशिप डेवलपमेंट प्रोग्राम (NLM-EDP) योजनांतर्गत ग्रामीण कुक्कुट नस्ल विकास, बकरी/भेड़ नस्ल विकास, फीड और चारा विकास एवं सुअर नस्ल विकास का सुगमतापूर्वक क्रियान्वित करने हेतु Model-DPR एवं Hyperlink **(https:/nlm.udamimitra.in)** विभागीय Website पर अपलोड करने की कृपा करें।

अनुलग्नकः– Model-DPR की प्रति।

विश्वासभाजन

07/12/24

परियोजना निदेशक,
बी0एल0डी0ए0, पटना।

Dittuks 07/12/24

ज्ञापांक– बी0एल0डी0ए0–100/2024–1515 पटना–14, दिनांक– 07/12/2024

प्रतिलिपिः– निदेशक, पशुपालन, बिहार, पटना को सादर सूचनार्थ प्रेषित।

07/12/24

परियोजना निदेशक,
बी0एल0डी0ए0,पटना।

Dittuks 07/12/24

ज्ञापांक– बी0एल0डी0ए0–100/2024–1515 पटना–14, दिनांक– 07/12/2024

प्रतिलिपिः–प्रधान सचिव के आप्त सचिव, पशु एवं मत्स्य संसाधन विभाग, बिहार, पटना को सादर सूचनार्थ प्रेषित।

07/12/24

परियोजना निदेशक,
बी0एल0डी0ए0,पटना।

Dittuks 07/12/24

Model DPR of Rural Poultry breed development unit (1000 Female +100 Male) under NLM Entrepreneurship Development Programme

A. ABOUT THE APPLICANT (Fill any one out of a, b or c, whichever is applicable)

a. In case of *Individual*

Sl. No	Particulars	Details
1.	Name	
2.	Name of the Key Promoter (if Joint Application)	
3.	Age	
4.	Sex	
5.	Aadhaar Card No.	
6.	PAN Card No.	
7.	Permanent Address	
8.	Contact No.	
9.	Date of Birth	
10.	Educational qualification	
11.	Years of Farming Experience	
12.	Bank Account Number	
13.	Name of Bank	
14.	IFSC Code of Bank	

OR

b. In case ofJoint Application

Sl. No	Particulars	Details of Joint applicants					
1.	Name of joint applicants	**Name**	**Age**	**Sex(F/M)**	**PAN Card No.**	**Aadhaar Card No.**	**Contact Details**
2.		i.					
3.		ii.					
4.		iii.					
5.	Name of key promoter (between the above-mentioned joint applicants)						

Sl. No	Particulars	Details of Joint applicants
6.	Permanent Address of key promoter	
7.	Date of Birth of key promoter	
8.	Educational qualification of key promoter	
9.	Years of Farming Experience of key promoter	
10.	Bank Account Number	
11.	Name of Bank	
12.	IFSC Code of Bank	

OR

c. **About The SHG, FCOS, JLG, FPOs, Dairy Cooperative Societies, Section 8 <u>Companies</u>**

Sl. No	Particulars	Details
1	Name of the Organization	
2	Name of the Key Promoter	
3	Establishment Details (DD/MM/YYYY)	
4	Registration Number	
5	Registration Address	
6	Contact Number	
7	Pan Card	
8	Number of Partners (in any)	
9	Name of the Partners	
10	Bank Account Number	
11	Name of Bank	
12	IFSC Code of Bank	

B. ABOUT THE PROJECT

SL NO.	PARAMETERS		VALUES
1.	Name of breed		
2.	Unit Size	a. No. of Male	
3.		b. No. of Female	
4.	Project Location		
5.	Poultry farmingfarming Experience (Yes/No)		
6.	Land Ownership (Owned/lease deed)		
7.	Total Land Area (in acres)		
8.	Number of people employed		
9.	Number of farmers to be impacted		
10.	Implementation period (No. of Years)		
11.	Electricity (Yes/No)		
12.	Land Connectivity (Yes/No)		
13.	Distance from nearest Vet. Hospital (in Kms)		

C. MEANS OF FINANCE (Fill any one out of a or b, whichever is applicable)

a) BANK LOAN			
Sl. No	**Particulars**	**Amount**	**Percentage (%)**
1	Subsidy from Govt.		50%
2	Own Contribution		10%
3	Bank Loan		
	Total (Rs.)		

OR

b) SELF FINANCE			
Sl. No	**Particulars**	**Amount**	**Percentage (%)**
1	Subsidy from Govt.		50%
2	Own Contribution		50%
	Total (Rs.)		

D. PROJECT PROFILE

i. INTRODUCTION

Poultry farming holds significant importance in India due to its pivotal role in providing livelihood opportunities, enhancing nutritional security, and fostering rural development. As an integral part of rural livelihoods, poultry farming offers smallholder farmers a sustainable source of income and employment, particularly in regions where access to other economic opportunities is limited. Moreover, rural poultry farming serves as a crucial supplement to household diets, providing valuable sources of protein through eggs and meat, thereby addressing malnutrition, and contributing to food security in rural communities. Over the past few decades, the Indian poultry industry has undergone a significant transformation. It has transitioned from traditional backyard farming to a techno-commercial industry that employs scientific methods to enhance production of chicken and eggs. As a result, India now ranks as the second largest egg producer and the fifth largest chicken meat producer globally. The poultry population in India has experienced substantial growth in recent years.

ii. PROJECT OBJECTIVES

- Increase in production of eggs.
- Employment generation.
- To meet the ever increase demand of eggs.
- Establishment of Forward and Backward linkages.

iii. REQUIRED CONDITIONS

a) **Housing:**

The house construction will be solid, featuring asbestos roofing. Additionally, there are built-in laying nests. The project includes the installation of a tube well and laying of pipelines. Furthermore, there are plans to construct a brooder-cum-grower house, measuring at a rate of 1 square foot for the layer. Suitable quarantine/ isolation units will be made to check any disease transmission.

The different units will be as per the scheme guidelines.

b) **Water:**

Good quality fresh water for birds drinking and for the cleaning, washing etc. to be made available.

Waste Disposal: Optimum measures to utilize the excreta and recycle the animal waste are to be ensured as this will also lead to generation of income.

c) **Veterinary Aid:**

Veterinary aid /breeding centers facilities to be available near the Poultry farm.

iv. MARKET POTENTIAL

The overall global demand for eggs is growing, more in India. With rapidly changing lifestyles, affluent culture, and a conscious need for general wellness, Indian consumers are now opting for a more protein-rich diet. The changing trends are a boon for the layer sector in India. Today, India's per capita egg consumption is at 41 eggs per annum. Over the last couple of years, the per capita consumption of eggs has increased at an aggregate of 4% with a majority consumption recorded in the urban areas. Efforts

to promote egg consumption are in place by layer farming community in India to achieve 180 eggs per annum in the coming years. Keeping this target in mind, the requirement for production is estimated at 18,000 crores (180 billion) eggs, while the current rate is capable of achieving only 46.2 billion eggs. This provides for a huge opportunity to tap into. With rapid urbanization and increasing demand from the present 250 million economically strong, consumer market base, the future is only bright for the layer sector in India. Affluent lifestyles and rapid development in the retail and food service industries is expected to fuel the growth as targeted by The National Committee on Human Nutrition in India. Adding to this is the health-conscious Indian shifting from a carbohydrate to a protein-rich diet. In addition, the Indian consumers' preference is increasing for clean, safe, hygienic nutritious and properly packed, labelled and presentable food products including eggs.

E. ECONOMIC OF THE PROJECT

a. Basis and Assumptions

Particulars	Unit	Quantity
I. Techno-economic parameters		
Breed of Poultry Birds		
Number of birds in breeding unit	(1000 Female +100 Male)	
Brooding cum growing period	Weeks	
Laying period	Weeks	
No of days for brooding		
No of days for hatching in unit	%	
Space required per birds in brooder cum grower house		
Mortality rate	%	
Saleable age of kids	Months	
II. Expenditure details		
Cost of one month old chicks		
Space required per birds in brooder cum grower house		
No. of Unskilled labor		
Cost of one semi-skilled labor/annum		
Requirement of concentrate feed/adult animal/month	Kg	
Requirement of concentrate feed/kid/month	Kg	
Rate of concentrate feed /kg	Rs	
Misc. expenditure i,e vaccine medicine and veterinary aid	Rs.	

Electricity and water supply per animal per month	Rs.	
Own contribution in project cost	%	
III. Income details		
Sale price of Eggs	Rs.	

b. Total cost of the project

I. CAPITAL COST				
Particulars	**Unit**	**Quantity**	**Unit Rate (Rs.)**	**Amount**
Poultry Parent Stock				
Construction of Shed	Sq.ft			
Electric Brooder	Nos			
Cost of Female bird	1000 Nos			
Cost of Male Bird	100 Nos			
Chick Feeder	Nos			
Chick Drinker	Nos			
Adult Feeder	Nos			
Adult Drinker	Nos			
Hatchery for Hatching Eggs				
Incubator	Rs.			
Construction of Hatchery Building	Sq. ft.			
Hatcher Capacity	Nos			
Generator	Nos			
Mother Unit for Brooding Chicks				
Construction of shed	Sq.ft.			
Electric Brooder	Nos			
Chick feeder	Nos			
Chick Drinker	Nos			
Other				
Insurance of Birds	Rs			
Medicines/Vaccination	Rs			
Transportation	Rs			
Sub-Total (A)				

RECURRING EXPENDITURE for 1st year				
1. Concentrate feeds	Rs. /Kg			
2. Concentrate feeds for kids	Rs. /Kg			
3. Unskilled labor	Rs/Annum			
4. Electricity & water supply	Animal/Year			
5. Miscellaneous.	Rs.			
Sub- Total (B)				

*Eligible subsidy is 50% of capital cost.

Total Cost of Project (A + B) _____

c. Projected Performance & Profitability

Flock Production Chart

Particulars	I Year	II Year	III Year	IV Year	V Year
Total Eggs Production					
Total Eggs /Year/bird					
Total eggs from 1000 birds for year					
Total eggs after damage					
Total Sale of Eggs					
Total Eggs Production					
Total Eggs /Year/bird					
Mortality of Chick after hatching					
Total DOC sold					
* Eggs produced in the first year will be sold in second year and so on					

Financial Analysis

Particulars	I Year	II Year	III Year	IV Year	V Year
Capital Cost					
Recurring Cost					
A. Total Cost					
Income from sale of eggs					
Income from sale of chicks					
Income from sale of birds					
B. Total Income					
C. Net Income (B-A)					

Model DPR of Goat/Sheep breed development unit under NLM Entrepreneurship Development Programme.

Capacity (100+5/200+10/300+15/400+20/500+25)

A. ABOUT THE APPLICANT (Fill any one out of a, b or c, whichever is applicable)

a. In case of *Individual*

Sl. No	Particulars	Details
1.	Name	
2.	Name of the Key Promoter (if Joint Application)	
3.	Age	
4.	Sex	
5.	Aadhaar Card No.	
6.	PAN Card No.	
7.	Permanent Address	
8.	Contact No.	
9.	Date of Birth	
10.	Educational qualification	
11.	Years of Farming Experience	
12.	Bank Account Number	
13.	Name of Bank	
14.	IFSC Code of Bank	

OR

b. In case ofJoint Application

Sl. No	Particulars	Details of Joint applicants					
1.	Name of joint applicants	**Name**	**Age**	**Sex(F/M)**	**PAN Card No.**	**Aadhaar Card No.**	**Contact Details**
2.		i.					
3.		ii.					
4.		iii.					
5.	Name of key promoter (between the above-mentioned joint applicants)						
6.	Permanent Address of key promoter						
7.	Date of Birth of key promoter						
8.	Educational qualification of key promoter						
9.	Years of Farming Experience of key promoter						
10.	Bank Account Number						
11.	Name of Bank						
12.	IFSC Code of Bank						

OR

c. About The SHG, FCOS, JLG, FPOs, Dairy Cooperative Societies, Section 8 <u>Companies</u>

Sl. No	Particulars	Details
1	Name of the Organization	
2	Name of the Key Promoter	
3	Establishment Details (DD/MM/YYYY)	
4	Registration Number	
5	Registration Address	
6	Contact Number	

Sl. No	Particulars	Details
7	Pan Card	
8	Number of Partners (in any)	
9	Name of the Partners	
10	Bank Account Number	
11	Name of Bank	
12	IFSC Code of Bank	

B. <u>ABOUT THE PROJECT</u>

SL NO.	PARAMETERS		VALUES
1.	Name of breed		
2.	Unit Size	a. No. of Male	
3.		b. No. of Female	
4.	Project Location		
5.	Goat /sheep farming Experience (Yes/No)		
6.	Land Ownership (Owned/lease deed)		
7.	Total Land Area (in acres)		
8.	Number of peopleemployed		
9.	Number of farmers to be impacted		
10.	Implementation period (No. of Years)		
11.	Electricity (Yes/No)		
12.	Land Connectivity(Yes/No)		
13.	Distance from nearest Vet. Hospital(in Kms)		

C. MEANS OF FINANCE(Fill any one out of a or b, whichever is applicable)

a) BANK LOAN			
Sl. No	**Particulars**	**Amount**	**Percentage (%)**
1	Subsidy from Govt.		50%
2	Own Contribution		10%
3	Bank Loan		
Total (Rs.)			

OR

b)SELF FINANCE			
Sl. No	**Particulars**	**Amount**	**Percentage (%)**
1	Subsidy from Govt.		50%
2	Own Contribution		50%
Total (Rs.)			

D. PROJECT PROFILE

i. INTRODUCTION

Goat and sheep farming in India holds significant importance owing to its multifaceted contributions to the country's agricultural and rural economy. Economically, these small ruminants serve as vital sources of income and livelihood for numerous rural households, particularly small and marginal farmers, offering a reliable avenue for income diversification. Often referred to as the *"poor man's cow"*. Goats and sheep are accessible to small-scale farmers due to their lower feed and space requirements, providing a viable alternative to larger livestock. Furthermore, their meat and milk products contribute significantly to nutritional security, especially in regions with limited access to other sources of animal protein. With their inherent resilience to harsh environmental conditions, goats and sheep play a crucial role in mitigating the impacts of climatic variability, making them well-suited for semi-arid and marginal lands. Currently, India has one of the largest goat and sheep populations globally, with millions of animals reared across various states. According to government estimates, India's goat population is over 148 million, while the sheep population is over 74 million. However, the sector is predominantly characterized by small-scale and backyard enterprises, highlighting its potential for expansion and improvement. Moreover, India's rich diversity of native goat and sheep breeds presents opportunities for breed conservation and genetic improvement initiatives. With the growing demand for goat and sheep products in domestic and international markets, there is immense potential for value addition and export opportunities.

ii. PROJECT OBJECTIVES

a) Provide self-sustainability to farmers through scientific goat and sheep rearing
b) Breed improvement in Goats and Sheep
c) Promote scientific Goats/Sheep rearing among the farmers especially marginal and small farmers.
d) To meet the ever increase demand of Goats/Sheep meat.
e) Women empowerment through Goats/Sheep husbandry
f) Produce high milk yielder Goats/Sheep
g) Value addition of goat and sheep products like milk , wool etc
h) Develop alternate income source through byproducts -dung and vermin-compos etc.
i) Conversion of the small ruminant sector from unorganized sector to organized sector through promotion of entrepreneurship & investment and creation of forward & backward linkages.
j) Promotion of stall-feeding model of sheep and goat rearing.

iii. REQUIRED CONDITIONS

a) Housing;

Taking into consideration the local climatic conditions, a well ventilated shed can be constructed for the proposed project. The orientation of the building is planned in the North- South direction to give requisite protection as well as exposure to sunshine, rain, and wind. Shed will be constructed in such way in a raised platform (about 1 metre height from ground level)

b) Feed & Fodder cultivation

Goat and sheep are herbivorous animal with browsing habit. It prefers woody plants and pods with supplementation of grasses and herbages. Stall fed animals receive mixture of grasses, shrubs, weeds, thorny plants, pods, tree leaves. There are forest by-products e.g. banana leaves, banana stem, pine apple leaves, pine needles, wild root and tubers; crop by-products like jackfruit, tapioca leaves, pumpkin, sweet potato, squash etc. which can be fed to the goat/sheep. If fertile land with assured irrigation facilities is available so that fodder crops could be successfully raised and abundant good green fodders will be made available for small feeding throughout the year.

c) Water

Good quality fresh water for animal drinking and for the cleaning, washing etc. to be made available.

d) Electricity: The proposed site to be connected to a regular source of electricity.

e) **Waste Disposal:** Optimum measures to utilize the excreta and recycle the animal waste are to be ensured as this will also lead to generation of income.

f) Veterinary Aid: The entrepreneur shall undertake the overall management of the farm, including procurement on inputs and marketing of the goat/sheep. Local veterinary health service will be hired as per necessity.

iv. Market Potential

More than 40 percent of the Indian Population is meat eater. Due to growing demand for sheep & goat meat in the local markets, there is a lot of scope for setting up of goat and sheep rearing units. Also, due to protein consumption awareness among growing children and young people, the demand for sheep & goat meat is increasing day by day in the country. Purchasing power of the people is on the rise and there is a distinct shift in consumption patterns. The breeding stock, young ones and adult goat and sheep have got very demand in the market. Hence, the scope for setting up of new sheep rearing & breeding units in the district is very good. By realizing the growing demand for meat, scope & income, the promoter has decided to set up a sheep breeding unit.

E. ECONOMIC OF THE PROJECT

a. Basis & Assumptions.

Sl No.	Particulars	Unit	Quantity
I.	**Techno-economic parameters**		
1.	Breed of Goat		
2.	No. of Does		
3.	No. of bucks		
4.	Age of maturity	Months	10-12 months
5.	Kidding interval	Months	8
6.	No. of kidding	per year	
7.	Kidding percentage	%	
8.	Mortality rate of kids	%	
9.	Mortality rate of adults	%	
10.	Average kidding size		
11.	Saleable age of kids	Months	
II.	**Expenditure details**		
12.	Space requirement per head for bucks	Sq.ft	
13.	Space requirement per head for doe	Sq.ft	
14.	Space requirement per head for kid	Sq.ft	
15.	Cost of construction of shed for kids	Rs./Sq.ft	
16.	Cost of construction of shed for parent stock	Rs./Sq.ft	
17.	Requirement of concentrate feed/adult animal/month	Kg	
18.	Requirement of concentrate feed/kid/month	Kg	
19.	Rate of concentrate feed /kg	Rs	
III.	**Income details**		
20.	Sale price of Buck (10 months)	Rs.	
20.	Sale price of doe (10 months)	Rs.	

b. Total cost of the project

CAPITAL COST					
Sl No.	**Particulars**	**Unit**	**Quantity**	**Unit Rate (Rs.)**	**Amount**
1.	Cost of Does	Rs.			
2.	Cost of Bucks	Rs.			
3.	Shed of Does & Buck	Nos.			
4.	Shed of Kids & sick pen	Nos.			
5.	Equipment for Feeding	Rs. /Animal			
6.	Chaff Cutter	Nos.			
7.	Integrated silage making machine	Nos.			
8.	Fodder cultivation	Acre			
9.	Insurance	%			
10.	Expenditure on vaccine & Medicines,	Animal/Year			
11.	Transport charges	Rs.			
12.	Miscellaneous expenses	Rs.			
	Sub- Capital Cost (A)				

RECURRING EXPENDITURE for 1st year					
SL No.	**Particulars**	**Unit**	**Quantity**	**Unit Rate (Rs.)**	**Amount**
1.	Concentrate feeds	Rs./kg			
2.	Concentrate feeds for kids	Rs./kg			
3.	Unskilled labor	Rs/Annum			
4.	Electricity & water supply	Animal/Year			
5.	Miscellaneous.	Rs.			
	Sub- Total (B)				

*Eligible subsidy is 50% of capital cost.

Total Cost of Project (A + B) _____

c. Projected Performance & Profitability

Flock Production Chart.

Particulars	**I Year**	**II Year**	**III Year**	**IV Year**	**V Year**
No. Of Kidding/Year					
No. Of Kids born Male					
No. Of Kids born Female					
Mortality in Male kids @ ____%					
Mortality in Female kids @ ___%					
No. of Male Kids available for sale					
No. of Female Kids available for sale					
* Kids produced in the first year will be sold in second year and so on					

Financial Analysis

Particulars	I Year	II Year	III Year	IV Year	V Year
Capital Cost					
Recurring Cost					
A. Total Cost					
Income from Male animals					
Income from Female animals					
Other Income(sale of by-products like compost, milk etc)					
B. Total Income					
C. Net Income (B-A)					

Model DPR of Feed & Fodder development unit under NLM Entrepreneurship Development Programme. Capacity(MT/annum)

A. ABOUT THE APPLICANT (Fill any one out of a, b or c, whichever is applicable)

a. In case of *Individual*

Sl. No	Particulars	Details
1.	Name	
2.	Name of the Key Promoter (if Joint Application)	
3.	Age	
4.	Sex	
5.	Aadhaar Card No.	
6.	PAN Card No.	
7.	Permanent Address	
8.	Contact No.	
9.	Date of Birth	
10.	Educational qualification	
11.	Years of Farming Experience	
12.	Bank Account Number	
13.	Name of Bank	
14.	IFSC Code of Bank	

OR

b. In case ofJoint Application

Sl. No	Particulars	Details of Joint applicants					
1.	Name of joint applicants	**Name**	**Age**	**Sex(F/M)**	**PAN Card No.**	**Aadhaar Card No.**	**Contact Details**
2.		i.					
3.		ii.					
4.		iii.					
5.	Name of key promoter (between the above-mentioned joint applicants)						
6.	Permanent Address of key promoter						
7.	Date of Birth of key promoter						
8.	Educational qualification of key promoter						
9.	Years of Farming Experience of key promoter						
10.	Bank Account Number						
11.	Name of Bank						
12.	IFSC Code of Bank						

OR

c. About The SHG, FCOS, JLG, FPOs, Dairy Cooperative Societies, Section 8 Companies

Sl. No	Particulars	Details
1	Name of the Organization	
2	Name of the Key Promoter	
3	Establishment Details (DD/MM/YYYY)	
4	Registration Number	
5	Registration Address	

Sl. No	Particulars	Details
6	Contact Number	
7	Pan Card	
8	Number of Partners (in any)	
9	Name of the Partners	
10	Bank Account Number	
11	Name of Bank	
12	IFSC Code of Bank	

B. ABOUT THE PROJECT

Sl. No	Particulars	Details
1.	Name of Product Type	
2.	Total Capacity Unit	
3.	Project Location	
4.	Land Ownership (Owned/Leased)	
5.	Total Land in Area (in acres)	
6.	Status of Electricity	
7.	Status of Water Supply	
8.	Number of people employed	
9.	Number of farmers to be impacted	
10.	Distance from nearest Market	
11.	Implementation period (No. of Years)	

C. **MEANS OF FINANCE (Fill any one out of a or b, whichever is applicable)**

a) BANK LOAN			
Sl. No	**Particulars**	**Amount**	**Percentage (%)**
1	Subsidy from Govt.		50%
2	Own Contribution		10%
3	Bank Loan		
Total (Rs.)			

OR

b) SELF FINANCE			
Sl. No	**Particulars**	**Amount**	**Percentage (%)**
1	Subsidy from Govt.		50%
2	Own Contribution		50%
Total (Rs.)			

D. **PROJECT PROFILE**

i. **INTRODUCTION**

The availability of fodder is a major area of concern; there is a gap between its demand and supply in the country. As per the estimates of the Indian Council for Agricultural Research (ICAR)-affiliated National Institute of Animal Nutrition and Physiology (NIANP), the deficit in the requirement and the availability of dry fodder, green fodder and concentrates during 2015 was to the extent of 21 per cent, 26 per cent, and 34 per cent, respectively. This is likely to increase to 23 per cent, 40 per cent, and 38 per cent, respectively, by 2025.

India is facing an extreme animal feeder shortage, which is a "major factor" behind the recent rise in costs of milk production, a study released by a government institute. The report points out that the shortage in fodder availability is a "major reason" why Indian livestock's milk productivity is 20-60 per cent lower than the global average. Feeding alone constitutes 60-70 per cent of milk-production costs.

A special section on the forages from new niches and non-conventional sources provide the opportunity for technological backup to explore these areas for diversification and expansion of forage resource development. One of the technologies in fodder production is making fodder block. There is urgent need of development of entrepreneurship in the field of fodder, promote, developing and disseminating forage technologies through frontline technology demonstrations. Similarly main aim in production of quality fodder with affordable price at local level and to encourage local farmers for fodder production and reduce the volume of fodder for storage and transportation.

Benefits of Fodder block and silage making

Fodder Block is an environmentally safe and economically viable option for making and storing fodder for livestock. It can be re-cycle, re-utilize or sell/ export these fodder blocks to earn profits, and at the same time, justice with the environment by fulfilling corporate social responsibility. It is like giving back to the Mother Nature in terms of value it pays. In areas where the fodder scarcity is high and there is not much availability of nutritious feed to the animals/cattle, the fodder block machines are extremely beneficial. It is economical and can be used as animal fodder during disaster. In urban areas, cattle are forced to eat domestic garbage for their survival. A large number of cattle perish for non-availability of animal fodders and balanced feed. This problem can be solved only through a planned scientific management of transportation, storage and management of crop residues and hay in different regions of the milk shed. Similarly, the fodder blocks may be used during scarcity period.

ii. REQUIRED CONDITIONS

a) Site Selection:

- Choose a location that allows easy access for raw material transportation, has sufficient space for the shed, and complies with local zoning and environmental regulations.
- Ensure the site is well-drained to prevent waterlogging.

b) Shed Design and Layout:

- Engage with an architect or a shed design expert to create a layout that optimizes space utilization and workflow efficiency.
- Consider factors such as the height of the shed, ventilation, and natural lighting to create a conducive working environment.

c) Structural Stability:

- Ensure the shed is designed and constructed to withstand the local climatic conditions, including wind loads, snow loads, and seismic considerations.
- Use durable and corrosion-resistant materials for long-term stability.

d) Raw Material Storage Area:

- Designate a specific area within the shed for the storage of raw materials.
- Implement an organized system for raw material inventory management to facilitate easy retrieval.

e) Godown Space:

- Allocate a separate section for a godown or warehouse within the shed to store finished products.
- Implement a systematic storage system to streamline product retrieval and dispatch.

f) Machinery Layout:

- Plan the layout of machinery to optimize the production process flow.
- Ensure adequate spacing between machines for safety and maintenance access.
- Consider future expansion when designing the machinery layout.

g) Utility Connections:

- Ensure proper provisions for electricity, water supply, and drainage systems.
- Implement safety measures for electrical installations and equipment.

h) Environmental Considerations:

- Implement eco-friendly practices, such as rainwater harvesting and waste disposal systems.
- Consider sustainable construction materials and practices.

iii. PROJECT OBJECTIVES

a) Development of Entrepreneurship in the field of Feed and fodder.

b) Promoting, developing and disseminating forage technologies through frontline technology demonstrations.

c) To make available quality fodder with affordable price at the local level.

d) To encourage the fodder production by the local farmers for supplying to these entrepreneurs. Thus use the fodder as a cash crop.

iv. MARKET POTENTIAL

- Growing demand for processed fodder due to increased awareness of its benefits.
- Enhanced livestock health and productivity leading to increased demand from farmers.
- Potential to cater to local and regional markets, contributing to the overall growth of the livestock industry.

E. ECONOMIC OF THE PROJECT

a) Techno economical Parameters (Assumptions for Project)

Sr No	Particulars	Parameters
1.	Production capacity per shift __(MT)/day for fodder block making	_____ MT/annum
2.	Number of working days	200 days
3.	The raw material requirement	_____ MT
4.	Capacity utilisation (%) for 1st years	
5.	Capacity utilisation (%) 2nd years onwards	
6.	Cost of raw material of Silage/fodder block (Rs /MT)	
7.	Manpower skilled Charges (total in Rs)	
8.	Supervisor charges (total in Rs)	

9.	Electricity / diesel charges (total in Rs)	
10.	Maintenances cost of plant & machinery of total cost (total in Rs)	
11.	Value addition by jaggery, molasses, minerals, and salt (total in Rs)	
12.	Administrative and selling expenses (total in Rs)	
13.	Depression on building cost (%)	
14.	Depreciation value on plant and machinery (total in Rs)	
15.	Production of Silage/fodder block (MT/annum)	
16.	Cost of Silage/fodder block (total in Rs)	
17.	The project recovery period	
18.	Bank loan /term loan is considered (%) per annum	
19.	Interest on working capital (%) per annum	

b) Total cost of the project (*Silage Making/ TMR, whichever applicable*)

SILAGE MAKING UNIT:Indicative list of components eligible for funding.
(Production capacity 2000-2400 MT per annum)

CAPITAL COST				
Sl. No.	**Item**	**Quantity**	**Unit Rate (Rs.)**	**Amount**
01	Construction of shed and godown (2000 square ft) @ 200per.sq.ft for material			
02	Bailing Unit (120-150 mt)	1		
03	Harvester	1		
04	Power operated chaff cutter	1		
05	Installation cost of plant and machinery			
06	Shed for machinery storage (60'x50'x20')@200 per sq. ft			
07	Tractor with Mounted Trolley	1		
SUB- CAPITAL COST (A)				

WORKING CAPITAL				
01	Cost of Raw Material			
02	Cost of Labour			
03	Packaging Cost			
04	Fuel & Electricity Cost			
05	Transportation			
06	Miscellaneous			
SUB- TOTAL (B)				

*Eligible subsidy is 50% of capital cost.

Total Cost of Project (A + B) _____

TMR BLOCK MAKING UNIT:Indicative list of components eligible for funding for (30 MT/day)

CAPITAL COST				
Sl. No.	**Item**	**Quantity**	**Unit Rate (Rs.)**	**Amount**
01	LD-HD Cutting with electric motor starter, panel board, V-belt, Pulleys etc. LD Low Density Materials (like paddy straws)	1		
02	HD-LD Mixer complete with Electric Motor, HD-High Density materials (concentrate Pre-mixes)	1		
03	Densified TMR block maker with electric motors starter, hydraulic oil, cooling system	2		
04	Platform electronic Weigh Scale	2		
05	Main control panel complete with tarter contractors, relays meter, conduits, and fittings, cable trays etc.	1 lot		
06	Stitching machine double thread	2		
07	Molasses Storage tank (2 MT capacity) OH molasses tank (80 kgs) capacity	1		
08	Grinding section fitted with an elevator motor connecting piece of magnet. Bin for grindables in M.S. handle operated, Hammer mill half circle capacity 2 MT/ hr with sieve and complete with foundation fitted with motor and drive parts.	2		
09	Mixing section fitted with ground material lifting elevator with discharge with motor and connecting piece of magnet Bin above batch mixture with discharge control. Paddle type batch mixture with MS construction fitted with motor.	1		
10	Power supply (Gen set) 140 KVA	1		
11	Shed for machinery (60'x50'x20') @ Rs. 200persq.ft	1		
12	Shed for storing raw materials(60'x100'x20') @ Rs. 200 per sq. ft	1		
SUB- CAPITAL COST (A)				

WORKING CAPITAL				
01	Cost of Raw Material			
02	Cost of Labour			
03	Packaging Cost			
04	Fuel & Electricity Cost			
05	Transportation			
06	Miscellaneous			
SUB- TOTAL (B)				

*Eligible subsidy is 50% of capital cost.

Total Cost of Project (A + B) _____

c) Financial Analysis

Financial Year	**I Year**	**II Year**	**III Year**	**IV Year**	**V Year**
A) INCOME : -					
Gross Income from sale of product					
Other Income					
TOTAL INCOME(A)					
B) Capital Expenditure					
B) Working Capital Expenditure					
Raw Material purchases					
Manpower					
Cost of Power					
Repair & Main. Cost					
packing cost					
Depreciation Cost					
Term Loan Repayment					
Term Loan Interest					
Other expenses					
TOTAL EXPENDITURE(B)					
C) NET PROFIT (A-B)					

Model DPR of Pig breed development unit under NLM Entrepreneurship Development Programme. Capacity(100+10/50+5)

A. ABOUT THE APPLICANT (Fill any one out of a, b or c, whichever is applicable)

a. In case of *Individual*

Sl. No	Particulars	Details
1.	Name	
2.	Name of the Key Promoter (if Joint Application)	
3.	Age	
4.	Sex	
5.	Aadhaar Card No.	
6.	PAN Card No.	
7.	Permanent Address	
8.	Contact No.	
9.	Date of Birth	
10.	Educational qualification	
11.	Years of Farming Experience	
12.	Bank Account Number	
13.	Name of Bank	
14.	IFSC Code of Bank	

OR

b. In case ofJoint Application

Sl. No	Particulars	Details of Joint applicants					
1.	Name of joint applicants	Name	Age	Sex(F/M)	PAN Card No.	Aadhaar Card No.	Contact Details
2.		i.					
3.		ii.					
4.		iii.					
5.	Name of key promoter (between the above-mentioned joint applicants)						
6.	Permanent Address of key promoter						
7.	Date of Birth of key promoter						
8.	Educational qualification of key promoter						
9.	Years of Farming Experience of key promoter						
10.	Bank Account Number						
11.	Name of Bank						
12.	IFSC Code of Bank						

OR

c. About The SHG, FCOS, JLG, FPOs, Dairy Cooperative Societies, Section 8 Companies

Sl. No	Particulars	Details
1	Name of the Organization	
2	Name of the Key Promoter	
3	EstablishmentDetails (DD/MM/YYYY)	
4	Registration Number	
5	Registration Address	

Sl. No	Particulars	Details
6	Contact Number	
7	Pan Card	
8	Number of Partners (in any)	
9	Name of the Partners	
10	Bank Account Number	
11	Name of Bank	
12	IFSC Code of Bank	

B. ABOUT THE PROJECT

SL NO.	PARAMETERS		VALUES
1.	Name of breed		
2.	Unit Size	a. No. of Male	
3.		b. No. of Female	
4.	Project Location		
5.	Goat /sheep farming Experience (Yes/No)		
6.	Land Ownership (Owned/lease deed)		
7.	Total Land Area (in acres)		
8.	Number of people employed		
9.	Number of farmers to be impacted		
10.	Implementation period (No. of Years)		
11.	Electricity (Yes/No)		
12.	Land Connectivity (Yes/No)		
13.	Distance from nearest Vet. Hospital (in Kms)		

C. **MEANS OF FINANCE(Fill any one out of a or b, whichever is applicable)**

a) BANK LOAN			
Sl. No	**Particulars**	**Amount**	**Percentage (%)**
1	Subsidy from Govt.		50%
2	Own Contribution		10%
3	Bank Loan		
Total (Rs.)			

OR

b) SELF FINANCE			
Sl. No	**Particulars**	**Amount**	**Percentage (%)**
1	Subsidy from Govt.		50%
2	Own Contribution		50%
Total (Rs.)			

D. **PROJECT PROFILE**

i. **INTRODUCTION**

Pig farming in India is primarily a small scale unorganized rural activity and is an integral part of diversified agriculture.

Piggery farms provide employment opportunities to rural population and gives supplementary income to the farmers. Pigs are omnivorous animals and are most efficient feed converters and have a higher feed conversion ratio as compared to sheep/goat and poultry. Commercial feed conversion ratio in case of pigs is usually about 3 - 5 (depending on specific breed) as compared to sheep/goat which is usually about 4 - 6. They produce more meat by eating low quality diet. They convert garbage into quality meat. Pigs are prolific breeders, and they produce more offspring in shorter duration.

Pig Farming requires relatively lesser investment and provide high returns. Dressing percentage[1] in pigs is 60-80% which is high compared to other meat producing animal. Pigs produce organic manure useful in agriculture farming. Pigs store rapid fats which is widely used in poultry feed, soap, paint, and chemical industries. Pigs give quick returns as the weight gain in fatteners is fast and can be achieved within 6-8 months. Pig products like pork, bacon, ham, sausages etc. have a great demand both locally and globally.

ii. PROJECT OBJECTIVES

a) Breed high-quality pigs.
b) Supply crossbred piglets to local farmers at a reasonable rate.
c) Encourage concentrate feeding.
d) Create employment opportunities.
e) Act as a Hub and Spoke model where the beneficiary entrepreneur will act as Hub and the famers of the area will get the benefit of the produce of hub,
f) Enhance income on a sustainable basis.

iii. REQUIRED CONDITIONS

a. Suitable Land: -

Suitable land or place is very important and first step for starting pig farming. The following may be considered while selecting/buying/leasing the land:

- Availability of sufficient amount of clean and fresh water.
- Calm and noise free area.
- Cheap land and easy availability of labours in cheap rate.
- Presence of a suitable market near the farm area is helpful.
- Better transportation system along with good market linkage is effective.

b. Infrastructure & other inputs:

i. **Construction of shed:**
Taking into consideration the local climatic conditions, a well ventilated house piggery shed can be constructed for the proposed project. The orientation of the building is planned in the North- South direction to give requisite protection as well as exposure to sunshine, rain, and wind.
The sheds are constructed scientifically taking into consideration the topography of the land so that there is an inter-connectivity between sheds to transfer animals from one shed to another and to facilitate farm activities like mating, heat detection, treatment/isolation etc.
The various sheds to be constructed are listed as under-

- Farrowing shed for sow
- Boar shed
- Piglet pen
- Isolation unit
- Quarantine unit

ii. **Drinking water:** Sufficient spring water should be available at the site.
iii. **Electricity:** The proposed site to be connected to a regular source of electricity.
iv. **Waste Disposal:** Optimum measures to utilize the excreta and recycle the animal waste are to be ensured as this will also lead to generation of income.
v. **Veterinary Aid:** The entrepreneur shall undertake the overall management of the farm, including procurement on inputs and marketing of the Pigs. Local veterinary health service will be hired as per necessity.

iv. Market Potential

More than 40 percent of the Indian Population are meat eaters. Due to growing demand for sheep & goat meat in the local markets, there is a lot of scope for setting up of goat and sheep rearing units. Also, due to protein consumption awareness among growing children and young people, the demand for sheep & goat meat is increasing day by day in the country. Purchasing power of the people is on the rise and there is a distinct shift in consumption patterns. The breeding stock, young ones and adult goat and sheep have got very demand in the market. Hence, the scope for setting up of new sheep rearing & breeding units in the district is very good. By realizing the growing demand for meat, scope & income, the promoter has decided to set up a sheep breeding unit.

E. ECONOMICS OF THE PROJECT

a. Basis & Assumptions.

Sl No.	Particulars	Unit	Quantity
I.	**Techno-economic parameters**		
1.	Breed of Pig		
2.	No. of Sow		
3.	No. of Boars		
4.	Age of maturity	Months	
5.	Kidding interval	Months	
6.	No. of piglets	per year	
7.	Mortality rate of piglets	%	
8.	Mortality rate of adults	%	
9.	Average kidding size		
10.	Saleable age of piglets	Months	
II.	**Expenditure details**		
11.	Space requirement per head for Sow	Sq.ft	
12.	Space requirement per head for Boar	Sq.ft	
13.	Space requirement per head for piglet	Sq.ft	
14.	Cost of construction of shed for kids	Rs./Sq.ft	
15.	Cost of construction of shed for parent stock	Rs./Sq.ft	
16.	Requirement of concentrate feed/adult animal/month	Kg	
17.	Requirement of concentrate feed/kid/month	Kg	
18.	Rate of concentrate feed /kg	Rs	
III.	**Income details**		
19.	Sale price of Piglets	Rs.	
20.	Sale price of adult	Rs.	

b. Total cost of the project

Sl No.	Particulars	Unit	Quantity	Unit Rate(Rs.)	Amount
	I. Capital Cost				
Construction of Pig Sty					
1.	Construction of shed for Sows @ 20sq.ft per sow (for …. Animals)	..... sq.ft			
2.	Construction of boar unit@70sq.ft/animal	..... sq. ft			
3.	Farrowing unit@ 80sq.ft per sow (Considering 50% of sows are occupying farrowing pen at any time)	....			
4.	Cost of construction of piglets pen @10sq.ft /piglet for ..... piglets	....			
5.	Store Room	500 sq, ft	Store Room		
Total (A)					
Cost of piglets for breeding					
6.	Cost of ..... no. of 5 months old gilts for breeding, weighing about 50 Kg	No of male pigs			
7.	Cost of 6 months old male pigs for breeding	No of male pigs			
Total (B)					
Other Capital expenditures					
8.	Cost of equipment for pigs (per animal)	No of pigs			
9.	Equipment for piglets (per animal)	No of piglets			
10.	Insurance charge @7.5 %	No of pigs			
11.	Veterinary Aids and Vaccination etc(per animal)	No of pigs			
12.	Transportation cost of animals	No of pigs			
13.	Other miscellaneous capital cost				
Total (C)					
D. Total Capital Expenditure (A+B+C)					

RECURRING EXPENDITURE for 1st year				
1	**Details**	**Total unit**	**Unit rate (in Rs.)**	**Total cost (in Rs.)**
1.	Concentrate feeds for adults	…… kgs		
2.	Concentrate feeds for piglets	…… kgs		
Total feeding cost year 1				
3.	Electricity charge/month	12 months		
4.	Labour charge @...../labour/month	12 months		
5.	Miscellaneous expenditure			
E.TOTAL RECURRING EXPENDITURE				

*Eligible subsidy is 50% of capital cost.

Total Cost of Project (D+E) _____

c. Projected Performance & Profitability

Flock Production Chart.

Production	**1st Year**	**2nd Year**	**3rd Year**	**4th Year**	**5th Year**	**6th Year**
Adult	00	00	00	…….	00	00
Piglets (Note- Assumed 80% conception rate)	…….	……	…….	……..	……	……

Financial Analysis

Particulars	**1st Year (Rs. In lakhs)**	**2nd Year (Rs. In lakhs)**	**3rd Year (Rs. in lakhs)**	**4th Year (Rs. In lakhs)**	**5th Year (Rs. In lakhs)**
i.Sale of adult pigs with 100Kg					
ii.Sale of piglets taking 3 cycle of production in 2 years with litter size 8@.....					
Sale of Manure					
A.Total revenue					
Capital cost					
a.Purchase of …… Gilt @.....		----------	----------		--------
b. Purchase of ….. Boar @.....		----------	----------		----------

Particulars	1st Year (Rs. In lakhs)	2nd Year (Rs. In lakhs)	3rd Year (Rs. in lakhs)	4th Year (Rs. In lakhs)	5th Year (Rs. In lakhs)
B. Total purchase cost					
c. Purchase of Feed					
d. Medicine& Vaccine					
e. Power & Fuel					
f. Salaries					
g. Wages					
h. Repair & Maintenance					
I. Transport & Travel expenses					
C. TOTAL COST					
D. NET PROFIT (A-(B+C))					