

PROJECT REPORT ON PIG FARMING

SCHEME- NATIONAL LIVESTOCK MISSION

PROJECT UNIT- 110(100 SOW+10 BOAR)

PROPRIETOR- -----

ADDRESS- VILLAGE -----, P.O - -----

BLOCK -----

DISTRICT – -----PIN----- (ODISHA)

MOBILE / WHATSAPP NO -----

EMAIL ID -----

PREPARED BY- Dr.-----

BVSC and A.H

ReGd. No. - OVC -XXXX

Veterinary Asst. Surgeon, Veterinary Hospital, XXXXXXXXX

Block- XXXX

PIN- XXXXX

DISTRICT- XXXXXXXX ODISHA

Mobile- XXXXXXXXXX

(A model for pig farming with 100 numbers is given below. An entrepreneur willing to establish a pig farm of 100 Capacity may refer this project report and customize the same as per the local condition, since the Techno-Economic parameters may differ on a case-by-case basis. The location, housing, water source, marketing potential etc may vary from location to location)

INTRODUCTION

1. Project description

Pig farming is not only a profitable business but also a very popular and lucrative business. Pig is widely used to eat and pork. But it is not an easy task to farming. It takes a lot of time and money to make a profitable pig farm. The challenges faced by our country in securing the food as well as nutritional security to fast growing population need an integrated approach in livestock farming. Among the various livestock species, piggery is most potential source for meat production and pigs are more efficient feed converters after the broiler. Apart from providing meat, it is also a source of bristles and manure. Pig farming will provide employment opportunities to seasonally employed rural farmers and supplementary income to improve their living standards.

The advantages of the pig farming are:

- a. Pig has got highest feed conversion efficiency i.e. they produce more live weight gain from a given weight of feed than any other class of meat producing animals except broilers.
- b. Pig can utilise wide variety of feed stuffs viz. grains, forages, damaged feeds and garbage and convert them into valuable nutritious meat. However, feeding of damaged grains, garbage and other unbalanced rations may result in lower feed efficiency.
- c. They are prolific with shorter generation interval. A sow can be bred as early as 8-9 months of age and can farrow twice in a year. They produce 6-12 piglets in each farrowing.
- d. Pig farming requires small investment on buildings and equipment.
- e. Pigs are known for their meat yield, which in terms of dressing percentage ranges from 65 - 80 in comparison to other livestock species whose dressing yields may not exceed 65%.
- f. Pork is most nutritious with high fat and low water content and has got better energy value than that of other meats. It is rich in vitamins like thiamin, Niacin and riboflavin.
- g. Pigs manure is widely used as fertilizer for agriculture farms and fish ponds.
- h. Pigs store fat rapidly for which there is an increasing demand from poultry feed, soap, paints and other chemical industries.
- i. Pig farming provides quick returns since the marketable weight of fatteners can be achieved with in a period of 6-8 months.

j. There is good demand from domestic as well as export market for pig products such as pork, bacon, ham, sausages, lard etc.

2.Project Location

Details of the location for establishment of the unit is to be mentioned.

3.Housing

To consider proper environment situation is very important to farming pig successfully. To farm pig farmers should make a pollution free environment. The pig industry needs a particular location. Without careful management of waste products, it may be very dangerous problem for child pig. It is a great and profitable process to make manure from the disposal of the pigs. It is very useful for agriculture. The environment of the outside and inside should protect all times because it is very essential to farming pigs. Inside environment is important for their health. The farming area should be made clean and dry. During the cold month, a heat lamp must be put and kept out of the north wind and south winds. Farmers should use straw as bedding during the winter. During summer season, it is very need that the pig has a place to lay in mud in the pen. So, always farmers should conscious about the pig's health and always try not to sweat them.

4.Feed & Fodder cultivation

As the major feeding ingredients for pig are by-products of rice processing units, our state has an advantage with regard to availability of raw materials for formulation of feed. Rice bran, rice polish, waste from chuda processing units, cashew processing units are utilised locally to make low-cost feed for pigs.. Similarly, Vegetable mandi will also be explored to collect unsold and rejected vegetable waste to convert them into pig feed. Farm will also cultivate azolla for incorporation in pig feed. In addition to this, concentrate feed will be procured from the market.

5.Water

To be ensured in the project

6.Labour

Honest, economic and regular supplies of labors are available in the project area.

7. Veterinary aid

Veterinary aid facilities are available near the proposed pig farm.

8. Market potential

Some section of people of Odisha prefers pork because it is a good source of low coat protein. In addition to local market, it will be transported to nearby state like Kolkotta, Jharkhand and North East region of India. There is high market potential in those states.

9. Export Potential

The scope for exports too is huge, however for selling pork abroad one has to adhere to strict phytosanitary conditions and standards of the respective nation

10. Economics of the project

Pig farming gives good returns for the amount invested, time and energy spent and labour involved. Small & marginal farmers, agricultural labourers, start-up entrepreneurs etc. can opt for pig farming in a small & medium scale to earn a good amount of income from this source.

For such project, the entrepreneur have to obtain "Consent to Establish & Consent to Operate" from State Pollution Control Board, Odisha. (www.ospcb.org.in / www.odocmms.nic.in)

A model economics for pig farming with 100 numbers is given below. This is indicative and applicable input and output costs and the parameters observed at the field level may be incorporated. An entrepreneur willing to establish a pig farm of 100 Capacity may refer this project report and customize the same as per the local condition, since the Techno-Economic parameters may differ on a case by case basis.

This project report is prepared as per the following assumptions:-

Techno-Economic Parameters			
SN	Particulars	Units	Amount
1	No. of sows (5 months old)	in Nos.	100
2	No. of boars (6 month old)	in Nos.	10
3	No. of batches	in Nos.	2
4	No. of piglets per sow per farrowing	in Nos.	10
5	No. of farrowing per year	in Nos.	2
6	Interval between two batches	in Months	3
7	Mortality of weaners	In %	15%
8	Mortality of fatteners	In %	10%
9	Weaning Period	in Months	2
Capacity Planning			
1	Space required for Boars	Sq.ft.	70
2	Space required for sow	Sq.ft.	20
3	Space requirement of farrowing pen (50 sow) (considering 50% of pigs are allows in farrowing)	Sq.ft.	80
4	Space requirement for pens for piglets @ for 3000piglets	Sq.ft.	10
6	Storeroom + Office	Sq.ft.	500
Pig Styes Calculation			
1	For Sows	in Sq.ft	2000
2	For Boars	in Sq.ft	700
3	Percentage of pigs in farrowing	In %	50%
4	Farrowing pen	in Sq.ft	4000
5	Pens for piglets @10 sq. ft per piglet for 3000piglets	in Sq.ft	30000
6	Store room / office room	in Sq.ft	500
	Total	in Sq.ft	37,200
Expense Calculation			
1	Requirement of Land (All Total)	Acre	1
2	Land Development/ LS	Rs.	15,000
3	Fencing/ LS	Rs.	30,000
4	Sty Construction cost per Sq.ft	in Rs.	200
5	Store and Office cum store Room	In Rs.	600
6	Borewell	in Rs.	90,000
7	Pump & Pipeline	in Rs.	20,000
8	Overhead tank	in Rs.	15,000
9	Purchase price per sow	in Rs.	6,000
10	Purchase price per boar	in Rs.	8,000
11	Equipments per animal	in Rs.	100
12	Equipments per piglet	in Rs.	75
13	Vaccines & Medicines per animal	in Rs.	300
14	Insurance charges in % of animal cost	In %	5%

15	Concentrate & Roughage Feed Ratio	in Ratio	50:50
16	Concentrate Feed per adult sow per day	in Kgs	1
17	Roughage Feed per adult sow per day	in Kgs	1
18	Concentrate feed per gilt upto maturity	in Kgs	120
19	Total Concentrate feed per gilt upto maturity	in Kgs	12,000
20	Roughage Feed per gilt upto maturity	in Kgs	180
21	Total Roughage Feed per gilt upto maturity	in Kgs	18,000
22	Concentrate Feed per adult boar per day	in Kgs	1
23	Roughage Feed per adult boar per day	in Kgs	1
24	Concentrate feed per young boar upto maturity	in Kgs	150
25	Total Concentrate feed per Young boar upto Maturity	in Kgs	1500
26	Roughage Feed per young boar upto maturity	in Kgs	150
27	Total Roughage Feed per young boar upto maturity	in Kgs	1500
28	Concentrate feed per piglet upto market weight	in Kgs	120
29	Total Concentrate feed per piglet upto market weight	in Kgs	96000
30	Roughage Feed per piglet upto market weight	in Kgs	120
31	Total Roughage Feed per piglet upto market weight	in Kgs	96000
32	Concentrate Feed Cost per Kg	in Rs.	15
33	Roughage Feed Cost per Kg	in Rs.	1
34	Numbers of labour	Number	2
35	Labour Charges for a Month	in Rs.	9000
36	Electricity Charge per Month	in Rs.	500
37	Weight of piglet at the time of sale	kg	75
38	Weight of culled adults at the time of sale i.e. in 3rd year	kg	175
39	Sale price of piglet /Kg	Rs.	100
40	Sale price of culled animals/kg	Rs.	80
41	Manure cost per Animal/ Year	Rs.	500

PROJECT AT A GLANCE			
SI No	PARTICULARS	UNIT	PARAMETERS
1	Category of the Project		Entrepreneurship Development
2	Type of the Project		Commercial Pig Farming
3	Unit Size	No	100+10
4	Product		Meat
5	Total Cost of the Project	INR	₹63,39,000
6	Promoter's contribution	INR	₹ 15,84,750
7	Bank Loan	INR	₹ 47,54,250
8	Financial Indicators		
	BCR at 15% DF	Ratio	1.19
	NPW 15% DF (Rs)	INR	₹ 40,43,224
	IRR (%)	%	34.02
	DSCR	No	1.96
9	Interest Rate	%	11%
10	Moratorium	Months	12
11	Repayment Period	Months	72

ESTIMATED PROJECT COST						
A	CAPITAL INVESTMENT					
	Particulars	Specifications		Units	Unit Cost Rs	Total cost Rs
1	Land	1	Acre		Available	
a	Land Development		Acre	15000	Rs.	15,000
b	Fencing		Acre	30000	Rs.	30,000
					Sub Total	45,000
2	Civil Construction					
a	Sty construction	37200	sq. ft	Rs.	200	7440000
b	Office-cum-Store Room	500	sq. ft	Rs.	600	300000
					Sub Total	32,60,000
3	Water Supply system					
a	Borewell / Tubewell		LS	1	90000	90,000

b	Pump & Pipe line		LS	1	20000	20,000
c	Sump / Over head Tank		LS	1	15000	15,000
					Sub Total	1,25,000
4	Electrification					
a	Installation & Fitting	2.0%	of civil cost			65,200
					Sub Total	65,200
5	Plant & Machinery					
a	Equipment for Animals	110	numbers	Rs.	100	11,000
b	Equipment for piglets	800	numbers	Rs.	75	60,000
					Sub Total	71,000
6	Animal & Plant cost					
	Livestocks :--- (including Transportation, Tax, & Insurance)	-				
	Purchase cost of Sows	100	numbers	Rs.	6000	6,00,000
	Purchase cost of Boars	10	numbers	Rs.	8000	80,000
					sub total	6,80,000
7	Miscellaneous					
	Insurance Premium of Assets :---					
	i. Fixed Assets	0.40%	of Civil Cost			13,040
	ii. Livestocks	7.5%	of Animal Cost			51,000
a	Contingency		LS		15760	15,760
					sub total	79,800
	Total Capital Cost					43,26,000
B	RECURRING EXPENDITURE (1 Year)					
a	Concentrate Feed Cost	109500	Kg	Rs.	15	16,42,500
b	Roughage Feed Cost	115500	Kg	Rs.	1	1,15,500
c	Medicines & Vaccine	110	Numbers	Rs.	300	33,000
d	Electricity Charges	500	Rs.	months	12	6,000
e	Labour Cost for 1 Year	2	Numbers	Rs.	9000	2,16,000
					Recurring Expenditure	20,13,000
C	TOTAL PROJECT COST					63,39,000
D	OWN CONTRIBUTION	20%	of Total Project Cost			12,67,800
E	BANK LOAN	80%	of Total Project Cost			50,71,200

Particulars	Unit	Unit Rate	Amount Rs
Term Loan	%	80	50,71,000
Own contribution	%	20	12,67,800
		Total	63,39,000
Subsidy entitlement@ 50% at capital cost Rs.21,63,000/-			

Projected performance & Profitability

PIGGERY PROJECTIONS													
Years	Opening Stock			No. of Piglets after Farrowing	Mortality during weaning	Weaners	Mortality during Fattening	Retained Stock	Culled Adults for Sale	Piglets for sale	Closing Stock		
	Sows	Boars	Piglets								Sows	Boars	Piglets
1	100	10	0	800	120	680	68	0	0	0	100	10	612
2	100	10	612	800	120	680	68	0	0	612	100	10	612
3	100	10	612	800	120	680	68	50	50	562	100	10	612
4	100	10	612	800	120	680	68	0	0	612	100	10	612
5	100	10	612	800	120	680	68	0	0	612	100	10	612
6	100	10	612	800	120	680	68	50	50	562	100	10	612
7	100	10	612	800	120	680	68	0	0	612	100	10	612

PROJECTED PROFITABILITY STATEMENT								
Particulars	1st yr.	2nd yr.	3rd yr.	4th yr.	5th yr.	6th yr.	7th yr.	TOTAL
COSTS								
Operating costs								
Cost of Feed (Concentrate feed)	16,42,500	16,49,100	16,49,100	16,49,100	16,49,100	16,49,100	16,49,100	1,15,37,100
Cost of Feed (Roughage feed)	1,15,500	1,13,590	1,13,590	1,13,590	1,13,590	1,13,590	1,13,590	7,97,040
Medicine & Vaccine Cost	33,000	33,000	33,000	33,000	33,000	33,000	33,000	2,31,000
Insurance (1st Year Capitalised)		51000	51000	51000	51000	51000	51000	306000
Wages & salary	2,16,000	2,16,000	2,16,000	2,16,000	2,16,000	2,16,000	2,16,000	15,12,000
Power bill	6,000	6,000	6,000	6,000	6,000	6,000	6,000	42,000
Total Operating Cost	20,13,000	20,68,690	20,68,690	20,68,690	20,68,690	20,68,690	20,68,690	1,44,25,140
Interest	3,91,174	4,67,235	3,80,308	2,93,380	2,06,453	1,19,525	32,598	18,90,673
TOTAL COST	24,04,174	25,35,925	24,48,998	23,62,070	22,75,143	21,88,215	21,01,288	1,63,15,813
BENEFITS								
Sale of piglets		45,90,000	42,15,000	45,90,000	45,90,000	42,15,000	45,90,000	2,67,90,000
Sale of culled animals			7,00,000			7,00,000		14,00,000
Sale of manure	4,55,000	3,61,000	3,61,000	3,61,000	3,61,000	3,61,000	3,61,000	26,21,000
Subsidy	21,63,000							
TOTAL BENEFIT	26,18,000	49,51,000	52,76,000	49,51,000	49,51,000	52,76,000	49,51,000	3,08,11,000
NET BENEFIT	2,13,826	24,15,075	28,27,002	25,88,930	26,75,857	30,87,785	28,49,712	1,44,95,187

Summary of the project

All the aspects of the project such as
Promoters background Experience,
projects capacity,
project location,
cost of project and means of financing,
availability of utilities,
Market prospects and selling arrangements
Environmental Aspects.

Has been deeply studied for the above Project and found appropriate to establish the unit
Detailed project report is now submitted for necessary action.