

Poultry Farm and Consultancy centre

PROJECT DESCRIPTION

Project Goal:

“To accelerate the growth of the rural economy by providing timely, quality Broilers to the Market and consultancy to the farmers.”

Activities at Broiler Poultry Farm Centre:

- Resource centre for awareness on various development related issues.
- Facilitator for creation of SHGs and farmers' clubs
- Moderator for smooth functioning of SHGs and farmers' clubs
- Information generation at grass root level for developing farmers' and area profile
- Capacity Building, training and field visits etc.
- Technology transfer through demonstration and training
- Arranging interaction between technical experts, local artisans and farmers.
- Backward and forward linkages in value chain
- Facilitation in bank and insurance related activities
- Market and product related information dissemination through use of Information Communication Technology (ICT)
- Contract production, agriculture and farm diversification
- Resources and activity planning with the help of customized software
- Crop specific consultancy and query redressal
- Farm equipment and machinery on lease and rental to the farmers
- Facilitation for various government schemes and programmes
- Implementation of government and development agencies supported programmes

Consultancy Model

For effective implementation of this project and carry out project activities appropriately and for regular facilitation / monitoring, the following human resource team has been identified-

Ministry of Agriculture, New Delhi



MANAGE, Hyderabad



Centre for Agriculture and Rural Development, Muzaffarnagar, Uttar Pradesh



Department of Agriculture, Lucknow, Uttar Pradesh



Department of Agriculture at District



Poultry Farming Centres



Farmers

Social Impact of the Project:

The project is on a participatory approach where stakeholders list involves entrepreneurs at grass root level, rural community, financial institutions, state and central government and other developmental organization. This wide participation ensures greater impact on the overall society on a sustainable basis. Being the role of the local community on priority in this project accountability will be ensured and the implementation will be inefficient mode. The Major impact of the project is listed below:

- Development of a self reliant, self sustained well informed and aware society
- Improved income in project area
- Better access to bank finances, leading to accelerated growth of rural enterprises
- Enhanced entrepreneurial and managerial skills.
- Better job and self employment opportunities
- Advanced skills to improve productivity of human resource
- Access to information by latest Information Communication Technology (ICT)
- Intervention of technology and technical orientation of community for better acceptability of technology
- Improved farm income through scientific agriculture, better resources planning based on information, improved marketing services, contract farming and forward linkages
- Diversification of agriculture and reduced pressure on agriculture because of training on alternative livelihood options
- Increased commercial activities in society with the increased actions of corporate
- Penetration of services like insurance, bank loan, animal health and agriculture extension

Poultry Project (Broiler Farming)

1. Importance of broiler farming

Poultry meat are important sources of high quality proteins, minerals and vitamins to balance the human diet. Specially developed breeds of egg type chicken are now available with an ability of quick growth and high feed conversion efficiency. Depending on the farm-size, broiler farming can be main source of family income or can provide subsidiary income and gainful employment to farmers throughout the year.

5.1 Poultry Housing

1. Select well raised land for poultry sheds. Land with hard rock or murrum is more suitable. Avoid water logging and flooding near the sheds.
2. Ensure adequate facility for water, electricity, approach road, supply of chicks, feed, veterinary aid and nearness to market for sale of cull birds..
3. Provide adequate floor space per bird (details are given in [AnnexureII](#)). BIS specifications for construction of poultry sheds are available.
4. Construct sheds in such a way that the end walls face East-West direction and the side walls face North-South direction, so that rain water will not enter the sheds.
5. Provide strong roof and hard flooring. Raise plinth of the sheds at least one foot above the outside ground level.
6. Provide 3 to 4 foot overhang of the roof to avoid entry of rainwater inside the shed.
7. Provide at least 50 feet distance between two sheds in the same sector and about 150 ft between growing and laying sector.
8. Provide adequate light and ventilation and comfortable housing conditions during all seasons (cool in summer and warm in winter).
9. Construct sheds in such a way that predators (cats/dogs/snakes) will not enter the shed. Avoid entry of rats by constructing rat proof civil structures.
10. Keep the shed clean and free from flies/mosquitoes etc.
11. After every batch of growers/culled birds is disposed off, the dirty litter material and manure should be removed, walls and floors should be cleaned, white washed with lime and disinfected with 0.5% malathion or DDT insecticide spray.
12. If deep litter system is followed, always use dry and clean litter material (sawdust, paddy husk, etc.). Spread 4" layer of litter on the floor, keep clean/disinfect brooding, feeding and watering equipment and then introduce chicks in the house.
13. The litter material should be always kept loose and dry. Stir the litter twice a week. Any wet litter/droppings etc. should be removed and replaced with fresh/clean dry litter.
14. If cage system is followed, ensure that droppings are spread with lime powder or 10% malathion spray twice a month to prevent menace of flies. The droppings under the cage can be removed after 6 months.

Poultry Equipment

16. Use scientifically designed cages and equipment for brooding, feeding and watering purposes. BIS specifications for equipment are available. A good design can be shown and manufactured locally, so that cost can be reduced.

Chicks

17. Purchase improved strain of one day old healthy egger type chicks from a reputed hatchery. Usually 2-5% extra chicks are supplied.

18. If cages are used for housing of birds ensure proper cage space i.e. half of the recommended floor space on deep litter.

19. Clean, wash and disinfect all equipments with 0.5% malathion spray after every batch of birds is disposed off.

Feeding

20. Use high quality balanced feeds. Starter feed (upto 8 weeks of age), grower feed (9 to 16 weeks of age) and layer feed (17 to 72 weeks of age) manufactured by reputed institutions/companies should be used. BIS feed formulae and specifications are available. With proper knowledge/ experience, the feed can be prepared on the farm. Feed requirements of birds are shown in [AnnexureIII](#).

21. Store the feed in clean, dry, well ventilated room. A wet feed may bring fungus infection.

22. Use properly designed feeders and control the rats to avoid feed wastage.

23. Provide adequate feeding space per bird. More space is required as the bird grows in age (details in [AnnexureII](#)).

24. Keep proper records on feed consumption per bird for each batch. About 7 kg. feed upto 20 weeks and 38 kg. feed from 21 to 72 weeks of age is required. Excess consumption may be due to feed wastage, rats, low temperature of shed or poor feed quality (low energy feed). Too low feed consumption may be due to disease condition, low quality/unpalatability of feed, high temperature in poultry shed.

Watering of Birds

25. Always give fresh and clean drinking water. Water should be always available at birds.

26. Use properly designed watering equipment. Provide adequate watering space per bird (details in [Annexure II](#)).

27. Always keep water-pots clean. Avoid birds entering inside pots.

28. Provide cool water during summer. Store the water in tanks that are not exposed to hot sun in summer.

Disease Prevention/Control

28. Clean sanitary conditions of poultry sheds and equipment, balanced feed, fresh clean water, healthy chicks are essential to prevent diseases.
29. Avoid entry of visitors to farm, especially inside the sheds. If visitors come, ask them to dip their feet in a disinfectant solution, wash and clean hands and to wear apron/boots provided by the farm.
30. Use proper vaccination schedule (details in [Annexure V](#)).
31. Use high quality vaccines purchased from reputed manufacturers. Keep vaccines in cool, dry conditions away from sunlight.
32. Any left-over vaccine should be properly disposed off. Vaccines should not be used after their expiry date is over.
33. Any dead bird should be immediately removed from the shed and sent to laboratory for post-mortem examination or buried/burnt suitably away from the poultry sheds.
34. The waste of farm should be suitably disposed off. Different workers should be employed in brooding and laying sheds.
35. Any bird showing advanced signs of a disease, should be removed from the shed and culled. It can be sent to laboratory for diagnosis.
36. Birds showing advanced signs of a disease should be shown to a qualified veterinarian and suitable medication/treatment be given as per his/drug manufacturers recommendations.
37. Poultry manure, if infected, can spread disease, from one batch to another. Keep the litter dry, remove it after flock is sold and dispose the manure properly and quickly.
38. Keep proper records on mortality and its causes and the treatment given to birds. Dates of vaccination for each flock should be properly recorded.
39. Rats are important carriers of poultry disease. Avoid rat. Use suitable rat poisons/rat traps.
40. Many poultry medicines can be given in drinking water. When medication is to be given, remove the waterers in poultry sheds on the previous evening. Next morning give medicine in measured quantity of water, so that entire medicine will be quickly consumed and there will be no wastage of medicines.
41. Mild infection of disease may not cause mortality but it will reduce growth. Keep sample record of body weight for growers, mortality rate and egg production. Study the possible causes, if weight is low or egg production is low and take steps to improve the management of the subsequent batches. A Constant vigil and analysis of records/results is necessary to keep up the efficiency in farming.
42. The guidelines for integrated bio security in poultry production are given in [Annexure VI](#).

I. Quality Birds

Choose the strain that will perform best and is known to have good livability under reasonable environmental conditions. Good chicks may cost more but they will perform better and pay more too.

II. Housing

There should be ample fresh air, free from drafts. Air must be circulating. High levels of non-desirable gases decrease growth rate and increase flock's susceptibility to respiratory disease. Ensure that the litter is dry. A well managed litter helps the birds in putting on feathers and improve feed conversion. It also reduces coccidiosis problem.

III. Crowding

Overcrowding increases mortality, stress, as well as production cost.

IV. Feeding

Always ensure adequate fresh feed. Birds that are without feed for six hours will record a drop in production and a 12 hour starvation will result in moult of wing feathers. There should be adequate feeder space for the birds. Guard against feed wastage. Maintain records of daily feed consumption. It will enable to determine feed utilisation and bird's performance.

V. Watering

Provide plentiful and clean disinfected water. This management factor, although obvious, is commonly violated. Water restriction is a quick way to accidentally force the flock to moult. Ensure that the waterers are so placed that they are easily accessible to the birds.

VI. Lighting

The duration of light should be 16 hours per day, but not beyond 17 hours. No advantage is obtained by exceeding this limit. The amount of light given to the flock in one day should never be less than that given the day before. A decreasing day length can prematurely cause hens to go out of production. One 40 watt electric bulb is sufficient for 200 sq.ft. Area.

VII. Vaccination

Ensure that all birds are vaccinated for Marek's Disease and Ranikhet Disease. Birds not vaccinated are highly susceptible to these diseases.

VIII. Debarking

Follow the correct debarking programme. Poor debarking can adversely affect egg production.

IX. Culling

Unsuitable and uneconomic birds should be timely culled.

X. Health

Watch for early signs of disease for its timely treatment before it flares up in a big way. Some of the symptoms that indicate the onset of disease problems are: Drop in egg production and feed consumption: increased morbidity and mortality: inactivity and lack of vigour droopy ruffled appearance and respiratory distress. Look for any sudden change in egg quality.

XI. Sanitation

Sanitary measures are of vital importance in poultry operations. Keep roundworms, tapeworms and cecal worms under control. External parasites are a serious farm hazard, and can reduce production if unchecked. Deworming at regular intervals should be practised.

XIII. Records

A daily record of feed consumption, egg production, mortality, income and expenditure is essential to help improve farming efficiency and pinpoint trouble and their solutions.

XIV. Routine Checking

Critical items of management should be listed on a daily, weekly or seasonal check list. Every item must be checked. It helps to locate the cause of trouble when it occurs. Routine checks are: Cleaning and refilling of the waterers and feeders: cleaning the house and spraying insecticide; stirring the litter; dusting; culling of birds; egg collection, etc.

Our commitment about our business reach on a pinnacle through our best services and consultancy with the help of corporations, governments etc. we will offer our best quality at appropriate cost

PROJECT TECHNICAL FEASIBILITY

Project Parameters		
S.No	Particulars	Amount in Rs.
1	Number of Birds	2000
2	Batch strength	2000
3	Bird purchased per batch	2000
4	Construction cost of the shed @ Rs.150/sq.ft (including labor room, store room, generator room)	300000
5	Submersible Pump, Water-Tank, Pipe fitting	50000
6	Electricity fitting	5000
7	Generator	40000
8	Birds considered for selling/batch (5% mortality)	1900
9	Cost of day old chick (Rs. Per bird)	24
10	Feed requirement per bird starter(kg. Per bird)	1.5
11	Feed requirement per bird finisher (kg. Per bird)	2
12	Cost of feed (average price per kg.)	30
13	Medicines vaccines , labour & Misc. Charges/ bird	8
14	Insurance per bird (Rs. Per bird)	4
15	Live weight of bird (Kg/bird)	2.3
16	Sale price (Rs. Per bird) @ 80/kg of live weight	180
17	Sale price of gunny bags (Rs. Per bag)	10
18	Interest on Bank loan (% p.a.)	12
19	Rearing period	07 weeks
20	Cleaning period of shed	08-12 days

Fixed Cost		
S.No	Particulars	Amount in Rs.
1	Shed	300,000.00
2	Generator	40,000.00
3	Light fitting, furniture, etc	5,000.00
4	Submersible pum	50,000.00
	Total cost	395,000.00

[B] Working capital for one batch

Operational Cost		
S.N.	Particulars	AMOUNT (in Rs.)
1	01 days old 6000 chicks @Rs. 24/ Chicks	48,000.00
2	Poultry feed Starter 1.5 kg/bird. @ Rs. 30/kg.	90,000.00
3	Poultry feed finisher 2 kg/bird. @ Rs.30 /kg.	120,000.00
4	Vaccine & medicines Charges @ Rs.8/ Birds	16000
5	Labour charges @ Rs.3/bird	6,000.00
6	Insurance Rs. 04 Per bird	8000
7	Other expenses	5000
	Total	293,000.00
	Capital Cost + Working Capital	688,000.00

Means of Finance

S.No	Particulars	AMOUNT (in Rs.)
1	Own Contribution 25% of the project cost	172,000.00
2	Subsidy	36%
3	Bank loan	516,000.00
4	TFO	688,000.00
5	Subsidy on TFO	247680

Project Particulars

S.No	Particulars	AMOUNT (in Rs.) for five cycles	Amount (in Rs.) For six cycles/2nd year onwards
		For 1 st year	For 2 nd to 6 th year
1	Parameters		
2	Birds costing/years @ Rs.24/bird*6000 bird	240000	288000
3	Poultry started @ 1.5kg/bird@ Rs.30/kg for 6000 birds	450000	540000
4	Poultry started @ 2.0kg/bird@ Rs.30/kg for 6000 birds	600000	720000
5	Vaccination @ Rs.8/bird	80,000.00	96,000.00
6	Labor charges @ Rs.3/bird	30,000.00	36,000.00
7	Insurance @ Rs.4/bird	40,000.00	48,000.00
10	Other expenses @ 5000/annually	5,000.00	5,000.00
	Total	1445000	1733000

Depreciation of the Fixed assets

S.No	Particular	Cost of the assets	Rate of Dep.	1st Year	2nd Year	3rd Year	4th Year	5th Year
1	Construction cost of the building	300,000.00	15	45000	38,250.00	32,512.50	27,635.63	23490.28125
2	Generator	40,000.00	15	6000	5,100.00	4,335.00	3,684.75	3132.0375
3	Light fitting and furniture	50,000.00	30	15000	10,500.00	7,350.00	5,145.00	1800.75
4	Submersible pump	50,000.00	10	5000	4,500.00	4,050.00	3,645.00	4920.75
	Total Depreciation	440,000.00		71,000.00	58,350.00	48,247.50	40,110.38	33,343.82

Profitability analysis

S.N.	Particulars	AMOUNT (in Rs.) For 1st year	AMOUNT (in Rs.) For 2nd to 6th year
1	Sales of 4750 broilers / cycle (average wt. 2.3Kg.) @Rs. 80/ kg. (5% mortality rate/batch)	1748000	2097600
2	Sale of Gunny bags and manure	50000	50000
	Total	1798000	2147600

Five years repayment schedule						
Amount of loan	Rate of interest	1st year	2nd year	3rd year	4th year	5th year
516,000.00	12.00%	61920	57792	43344	28896	14448
<u>Repayment Installment/year</u>	8600	103200	103200	103200	103200	103200
Balance at the year term lone		412,800.00	309,600.00	206,400.00	103,200.00	0.00

Five years profit loss projection						
S.No	Particulars / year	1	2	3	4	5
1	Income from stock	1798000	2147600	2147600	2147600	2147600
	Income from gunny bags	50000	50000	50000	50000	50000
2	Expenses	1,445,000.00	1,733,000.00	1,733,000.00	1,733,000.00	1,733,000.00
3	Surplus	353,000.00	414,600.00	414,600.00	414,600.00	414,600.00

Net profit calculation					
Year	1	2	3	4	5
Capital cost	395,000.00	0	0	0	0
Recurring cost	1,445,000.00	1,733,000.00	1,733,000.00	1,733,000.00	1,733,000.00
Bank loan Installment	103,200.00	103,200.00	103,200.00	103,200.00	103,200.00
Interest on loan	61,920.00	57,792.00	43,344.00	28,896.00	14,448.00
Depriciation	71,000.00	58,350.00	48,247.50	40,110.38	33,343.82
Total expenses	2,076,120.00	1,952,342.00	1,927,791.50	1,905,206.38	1,883,991.82
Sales Stock	1798000	2147600	2,147,600.00	2147600	2147600
Sales Gunny bags	20000	20000	20000	20000	20000
Gross profit	1818000	2167600	2167600	2167600	2167600
Net profit	-258,120.00	215,258.00	239,808.50	262,393.63	283,608.18
IRR	83%				