

**STUDY OF
RURAL POULTRY UNITS
WITH LOW INPUT TECHNOLOGY
IN UTTAR PRADESH AND
WEST BENGAL**



2002

CONTENTS

S.No.	Particulars	Page No.
1.	Introduction	1
2.	Committee Members	2
3.	Terms of Reference	2
4.	Study Area and Period	2
5.	Methodology and Data Collection	3
6.	Low Input Technology Poultry Birds	3
7.	Concept of Rural Poultry Units and Backward/Forward Linkages	5
	7.1 Chick Dealers	6
	7.2 Mother Units	7
	7.3 Cycle Vendors (perriwallas)	7
	7.4 Individual rural poultry units	
8.	Limitations of the Study	9
9.	Recommendations	9
	ANNEXURES	
I.	List of officers associated the study team	11
II.	a. Statewise details of dealers visited	12
	b. Statewise details of Mother units visited	13
	c. Statewise details of Cycle vendors interacted	14
	d. Statewise rural poultry units visited	15
III.	Comparative performance of Improved Commercial strains of poultry with low input technology	16
IV.	Centrally Sponsored Scheme - Assistance to State Poultry Farms	17
V.	Location of breeding farms and hatcheries - Kegg Farms	18
VI.	Regionwise / districtwise distribution of dealers, mother units and sale of kuroiler chicks	19
VII.	Regional office wise organisational set up and manpower for development works of Kegg Farms	22
VIII.	Economics of mother (Brooding) units	23
IX.	Economics of cycle vendors	28
X.	Economics of Rural poultry units	29

Study of Rural Poultry Units with Low Input Technology in Uttar Pradesh and West Bengal

1. Introduction

Rural Poultry Sector though contributing nearly 30% of the national egg production, is the most neglected one. The fact is that village poultry eggs and meat fetch a much higher price than that of commercial poultry. However, 70% of the poultry products and eggs are consumed in urban and semi-urban areas and their consumption in rural areas is very less. The low consumption is attributed to limited availability and to some extent low purchasing power of rural people. In order to overcome this problem, it may be necessary to take up specific rural poultry production programmes with low input technology to meet the requirement of the rural sector where the poultry farming constitute a source of subsidiary occupation, generating subsistence income to boost the nutritional standards, income levels and health of rural masses. The rural poultry (backyard poultry) units require very little hand feeding and provide handsome returns with minimum investment. Thus rural poultry farming not only generates income levels, employment opportunities to small farmers including women but also bring about desired socio-economic change in rural areas which are vital for rural development and rural prosperity.

The Department of Animal Husbandry and Dairying, Government of India under the Chairmanship of its Joint Secretary & Animal Husbandry Commissioner organised a meeting on 12 June 2002 at New Delhi to discuss various issues related to poultry production in the country. One of the action points of the proceedings of the meeting was to study the existing scheme on poultry marketing in rural areas for inclusion under the proposed venture capital fund of Department of Animal Husbandry and Dairying, Ministry of Agriculture, Government of India. Since Kegg Farms Pvt. Ltd. have done considerable pioneering work in the rural poultry production programme, it was considered to involve them in the study. Accordingly, a committee was constituted to study the rural poultry units in selected states.

2.0 Committee Members

The members of the committee were :

1. Dr.K.R.Rao, General Manager, NABARD, HO, Bandra Kurla Complex, Mumbai.
2. Shri.Shankar Ghosh, Chief Operations Executive, S N K Sammarak, Delhi (NGO supported by Keggfarms Pvt. Ltd., for implementation of rural poultry units).
3. Dr.S.Naik, Senior Technical Assistant, Department of Animal Husbandry and Dairying, Krishi Bhawan, New Delhi.

The other officers associated with the study team from NABARD as well as Kegg Farms are given in Annexure-I.

3.0 Terms of Reference :

The terms of reference of the study were :

- To study the present situation of rural poultry units in selected states
- To study the concept and the backward and forward linkages for the rural poultry units.
- Identification of potential areas and new investments for assistance under rural poultry units.
- To compare the performance of improved strains/breeds of coloured birds over the Desi birds in rural areas.
- To study the incremental poultry growth and incremental income of those families associated with rural units.
- To work out model economics for popularising the rural poultry units on the country side.

4.0 Study Area and Period

As considerable work was done by Keggfarms Pvt. Ltd. in Eastern Uttar Pradesh and West Bengal, the study was taken up in the selected districts of these states

between 26th August 2002 to 1st September 2002 and the details are given in the following paragraph :-

Date	Places of Visits
26.08.2002	Kegg Farms, Gurgaon - Visit to feed plant, hatchery, breeding farm and commercial unit. Presentation of the status of poultry farming in rural areas by Chairman, Kegg Farms Pvt. Ltd., followed by interaction.
27.08.2002 and 28.08.2002	Visit to dealers, mother units, vendors and rural poultry units in Siddharthnagar and Kushinagar districts of Uttar Pradesh and interactions with RM, Purvanchal Region, Kegg Farms Pvt. Ltd., Gorakhpur.
30.08.2002 to 01.09.2002	Visit to dealers, mother units and vendors of rural poultry units in the districts of North & South 24 Parganas and also interaction with the Regional Manager, Eastern Region, Kegg Farms Pvt. Ltd., Kolkata

The state-wise number of villages covered, number of dealers, number of mother units, and rural poultry units are given in Annexure-II.

5.0 Methodology and data Collection

Primary data on cost of chicks and feed purchased, expenditure on medicines, electricity and other related aspects from the farmers, number of birds purchased and sold, supply of feed, medicine and other services provided by the dealers to the mother (Brooding) units and the information on the number of birds sold by the vendors, area covered, investment and maintenance expenses and other related parameters were collected from the respective people directly. The required secondary data covering the performance of birds developed by various institutions, their annual supply of chicks and other related information has been compiled by collecting the same from respective organisations.

6.0 Low Input Technology Poultry Birds

The rural households were normally maintaining the desi birds under scavenging conditions. However, it was observed that in some of the areas especially in tribal areas and villages predominantly with Muslim population, rearing of a few strains of coloured birds introduced by Government organisations as well as private organisations. Department of Animal Husbandry has taken up in association with Indian Council of Agriculture Research a targeted programme for upgradation of low input technology birds through their All India Coordinated

Research Project on poultry and have since developed and released birds like Vanaraja, Krishibro, Krishilayer, Caribro, Carired, etc. for rural poultry activity.

The type of birds developed by various organisation were as under :

1. Project Directorate on Poultry, Rajendranagar, Hyderabad - Vanaraja (dual purpose)
2. Central Avian Research Institute, Izatnagar-CARI Gold (Dual purpose).
3. All India Co-ordinated Research Project on Poultry Breeding, Jabalpur-Krishna (dual purpose)
4. University of Agricultural Sciences, Hebbal, Bangalore - Giriraja (dual purpose)
5. Kegg Farms Pvt. Ltd., Gurgaon - Kuroiler (dual purpose)
6. AVM Hatcheries and Poultry Breeding Research Centre, Coimbatore - Coloured bird (dual purpose)
7. Kalyani Poultry Farms, Mumbai - Kalyani - D K Fowl (dual purpose)
8. Deejay Hatcheries, Bangalore - FR 295 Coloured Layers & Coloured Mini Broilers
9. Central Poultry Breeding Farm, Bhubaneswar - Kalinga Brown (egg type)
10. Poultry Research Station, Nandanam, Chennai - Coloured layers
11. Central Poultry Breeding Farm, Chandigarh - Cha-Bro (meat type)

The comparative performance of these commercial stock provided by the different agencies were given in Annexure-III. The improved strains depending upon the climate, nutrition and management, lay eggs ranging from 140 to 200 per bird per annum, under scavenging conditions compared to desi bird with an average of 60 to 90 eggs per year. Similarly, the bird attains a body weight of about 1.5 kg in about 12 to 14 weeks as against 0.5 kg of Desi bird.

The Govt. of India had supplied about 1.90 lakh parents and about 6.0 lakh commercial chicks annually, to the State Govt. farms as well as rural farmers in the country respectively. Similarly, the Agricultural Universities like UAS, Bangalore; Agricultural University, Jabalpur; CARI, Izatnagar and Project Directorate on Poultry (ICAR), Hyderabad had also supplied considerable number of commercial chicks in the respective regions. Overall, the availability of commercial chicks through public sector organisations is limited. Under centrally

sponsored scheme, Dept. of Animal Husbandry & Dairying, MOA, GOI assisted various poultry farms whose details are given in the Annexure-IV. Among private sector hatcheries, Kegg Farms Pvt. Ltd., Gurgaon was supplying about 15 million chicks per annum in Uttar Pradesh, West Bengal, parts of Orissa, Bihar, Jharkhand, Chattisgarh, Karnataka, Andhra Pradesh and Kerala.

7.0 Concept of Rural Poultry Units and Backward & Forward Linkages

M/s.Kegg Farms had developed a new bird named as 'Kuroiler' to address food security and poverty alleviation at the rural household level. The bird which was developed is a multicolour dual purpose bird capable of producing more number of eggs and good quality of meat. The birds could survive and thrive well on village/household waste. Since day old chicks were vulnerable to predators in free range conditions, Kegg Farms encouraged mother units or brooding centres run by rural entrepreneurs for brooding of day old chicks under reasonably controlled conditions for 3 to 4 weeks by which time these birds were capable of thriving in open range conditions.

The concept of rural poultry farming adopted for implementation by M/s.Kegg Farms Pvt. Ltd. in various states is described in the following paragraphs :-



Kegg Farms with their network of poultry breeding farms and hatcheries located in various places (Annexure-V) were producing commercial day old Kuroilers for

supplying to the mother units owned by the individual entrepreneurs through their dealers. Distribution of dealers, mother units and sale of chicks in different states of the country is given in Annexure VI. Similarly, the Regional Office-wise (Purvanchal and Eastern Regions) organisational set up and manpower for the developmental work is given in Annexure VII. The services provided by Kegg Farms include farmers training, technical assistance, organising seminars and workshops, circulating the literature on management aspects in local languages etc.

7.1 Chick Dealers

Kegg Farms appointed dealers at specified points for supply of day old chicks to mother units. The number of dealers vary depending upon the demand for Docs in a particular area and also concentration of mother units. On usual contract, hatchery supplies the chicks to dealers and from the dealer mother units get the required number of chicks either on cash payment or credit. Docs are supplied by the hatchery to the dealer point by its own vehicles, whereas from the dealer individual mother unit holders make their own arrangements to transport the chicks to respective centres and sometimes the same vehicle gives delivery at the mother units. Dealer buy the chicks from hatchery on cash at the rate of Rs. 7.50/chick and sell it on credit to mother units @ Rs. 8.5/chick. Dealers also get 2% free chicks which are normally supplied to the mother units. Generally, credit is given for a period of 25-30 days to mother units. It was practically seen that dealers had control over mother units and perriwallas (cycle vendors) as they give chicks, feed, medicines on credit. Many a time, the dealer himself arrange perriwallas to sell the grower birds from mother units and the collections are accounted against the loans given to mother units. In the absence of adequate technical support from the Department of Animal Husbandry / Poultry Corporation for the mother units and individual farms, dealer happened to be main source of technical advise in chick management, feed and medicine requirement, etc. Dealer is the main link between hatchery and mother unit. Each dealer has control over 5-10 villages and the monthly income ranges from Rs. 10,000 to Rs. 20,000 depending upon the sale of Docs in the respective areas. The dealer operate poultry business with his own money. There is a gap of one month to realise the returns from the mother units. Banks, if extended

cash credit to the dealers, the business will increase and thereby speedy growth of rural poultry units. However, they are not very keen in availing working capital limits as they have to fulfill number of formalities to the bank.

7.2 Mother (Brooding) Units

Mother units located in different villages maintained the day old chicks upto 20 to 30 days (depending upon the practice being followed in a particular area) and sold the grower birds to cycle vendors (perriwallas) who in turn take them to the interior areas for selling to the individual households for rearing them either for meat purpose or for egg laying.

It was observed in the field that some of the farmers had the asbestos tiled roof sheds, with *katcha* flooring and side brick walls with wire mesh. Otherwise, mostly thatched roof sheds with *kutchha* flooring were noticed. In some of the villages where there was no electricity, Kerosene brooders were used while in other villages electrical brooders were practiced. The feeders were mostly made of wood while mostly the drinkers were earthen pots. The concentrated feed was being purchased from the dealers and some of them were mixing feed after grinding the feed ingredients with the help of grinder. Farmers were vaccinating their birds with F2 strain for Ranikhet disease. Normally the mortality was 2 to 5% in case of these mother units. Based on the field observations and interaction with the entrepreneurs as well as the officials of Kegg Farms, the investment cost and economics of mother unit of the size of 2000 chicks per batch was worked out (Annexure VIII) for both thatched and asbestos roof of sheds.

7.3 Cycle Vendors (Perriwallas)

It was the practice in the field that mother units sold the growers (brooded chicks) to the cycle vendors who normally took them to the interior villages upto the distance of 60 to 70 kms from the mother unit to sell the growers to the farmers/house holds. The requirements of the vendor were a cycle, multi tier cage/ basket for keeping the birds, small aluminium water drinker and a feeder. The vendors normally spend some amount on maintenance of the cycle, expenditure on feed to the birds till they were sold and his own food

requirements. It is observed that some of the vendors were leaving house early in the morning and returning in the evening after selling the chicks while others returned on the 2nd or 3rd day after completion of sales. The income, expenditure and economic parameters of vendor's trade had been worked out, based on the field observations and interaction with the vendors in different regions. One mother unit of 2000 chicks would support three vendors with average profit of Rs. 3-5 per grower sold by the vendor. Cycle vendors buy the grower birds on credit and return the sale proceeds to the mother units/dealers on their return. This activity may not require any cash credit support. But credit may be given for purchase of cycle, basket/cage, Feeder and waterer which may be around Rs. 2000 per person. The investment cost and economics of a cycle vendor is given in Annexure IX.

7.4 Individual household farms

In the villages, households prefer coloured birds which produces more eggs and meat under scavenging conditions with minimum mortality. There are variations in husbandry and management practices of poultry in the selected states. Generally, males are sold for meat purpose and hens are retained for egg production. It was observed in the field that village households purchased the 3-4 weeks grower birds from the perriwallas @ Rs. 22-25 per bird and grown in the house itself. A night shelter was provided with small built up nest costing around Rs. 100 for 8-10 birds. Birds scavenge in the natural habitat and little expenditure is incurred on feed, medicine, etc. Birds attained a weight of 1.0 kg in about 45-50 days and around 1.5 kg in 90 days of scavenging. Birds were sold for meat purpose @ Rs. 60 per bird. Even if farmer purchases brooded chicks of 3-4 weeks old @ Rs. 22 - 25/bird, the returns from this activity amount to almost 100% profit in 45-50 days cycle. Hens kept for egg purpose will lay about 130-180 eggs per laying cycle which is 2-3 times more than the desi hens. Table eggs of kuroilers weigh about 55-60 gms/egg and brownish in colour which fetch about Rs. 2.00 to 2.50/egg in the village or semi urban region. After a laying period of one year, a hen normally weighs around 2.0 kg can be sold for meat @ Rs. 50/kg on live weight basis. Allowing normal mortality rate of 10%, the returns provide substantial supplementary income. Generally, the credit required at household level farming is not much. Farmer can start with 5-10

birds and gradually increase to the level of 40-50 numbers. This can be encouraged through NGO's among Self Help Groups. The economics of a rural poultry units (mixed type / meat purpose) with 20 birds is given in Annexure-X.

8.0 Limitations of Study

The team could not study the Rural Poultry units with coloured birds supplied by public sector organisations as well as other private organisations as their supply was very limited and not well organised.

9.0 Recommendations

1. Encourage rural households to adopt low input technology coloured birds for supplementing the income as well as to improve the nutrition standards.
2. The existing facilities of State Govt. poultry farms should be made use of for production and supply of commercial coloured birds to the households in rural areas.
3. While enlisting the new organisations for supply of coloured birds in rural areas following criteria may be given due consideration :
 - Number of years of experience in poultry breeding activities and their recognition by the Dept. of Animal Husbandry and Dept. of Science & Technology.
 - Performance evaluation of birds in different climatic condition
 - Size of commercial operations and their capacity to supply day old chicks.
4. The poultry breeding farms/ Regional Directorates of GOI should provide training and also technical services especially to the Mother Units.
5. Encourage NGOs, poultry associations, private organisations/bodies etc. through incentives to set up rural poultry units either directly or through SHGs/individuals and also to disseminate appropriate input technologies, farming techniques and other sustainable methodologies associated with integrated poultry production in rural areas.
6. GoI may encourage low cost poultry production by way of granting financial assistance to the entrepreneurs taking up the activity in rural and semi-urban areas. This will bring about significant socio-economic and environmental benefits for the target groups.

7. Assistance may be extended to mother units and vendors (perriwallas) by way of bank finance and incentives to establish and carry out the operations in rural areas.
8. GOI may arrange to conduct survey through some agencies by in potential states like Chattisgarh, Jharkhand, Bihar, MP, West Bengal, Orissa and N.E. States for wider coverage and implementation of low input poultry programme to bring about economic upliftment of rural masses in the country.
9. Identify the nodal agency/organisation/local body to carry out the survey as well as implementation of low cost poultry technology in the specified areas with a specified time frame.

List of Officers associated the Study Team from NABARD and KEGGFARMS

Sr. No.	Name	Designation	Organisation & Address
1	Mr. V.S. Kapur	Chairman	Kegg Farm Pvt. Ltd. Gurgaon
2	Mr. K.K. Sinha	Chief Executive	Kegg Farm Pvt. Ltd. Gurgaon
3	Mr. H. Sinha	GM	Kegg Farm Pvt. Ltd. Gurgaon
4	Mr. Ashok K. Pandey	RM	Kegg Farm Pvt. Ltd. Gorakhpur
5	Mr. Milan Kumar Biswas	RM	Kegg Farm Pvt. Ltd. Kolkatta
6	Dr. C.O. Reddy	DGM	NABARD, Mumbai
7	Dr. Milind Bhirud	Asst. Manager	NABARD, RO, Kolkatta
8	Dr. K. Ramalingan	Asst. Manager	NABARD, RO, Lucknow

Statewise details of dealers visited by the Study Team

S.No.	Name of dealer	Village	District	STATE	No. of mother units	No. of villages covered	No. of birds sold/month	Quantity of feed sold/month (Bags of 75 kg.)
1	R. A. Ansari	Birdpur	Siddharth Nagar	UP	20-25	15	10000 - 15000	180-200
2	Aslam Ansari	Pansoni	-do-	UP	22	5-6	12000 - 15000	180-200
3	Vyas K Jaiswal	Bhujoli Villa	Kushinagar	UP	70-80	20	25000	500-600
4	Ranjit	Hydatpur	24-Parganas(N)	WB	40	4-5	20000	500
5	Shankar Kumar De	Prakash Mandal	-do-	WB	32	4	15000 - 20000	200
6	Manaskumar Dev	Shipur	24-Parganas(S)	WB	6	4	4000 - 4500	30
7	Mohammed Yunus Mullick	Hokuldanga	-do-	WB	12	1	6000	Nil

Statewise details of Mother Units visited by the Study Team

Sr. No.	Name of the farmer	Village	District	State	No. of birds per cycle
1	Tayeb Hussain	Nonhwa	Sidhartha Nagar	U.P.	2200-2700
2	Md. Hussain	Nonhwa	Sidhartha Nagar	U.P.	2200
3	Mashurulla	Pirawah	Sidhartha Nagar	U.P.	1000
4	Mohammedullah	Pirawah	Sidhartha Nagar	U.P.	600
5	Nurulla	Pirawah	Sidhartha Nagar	U.P.	1000-1500
6	Mohmad Ali	Fanka Tanki	Sidhartha Nagar	U.P.	2200
7	Md. Ali	Pachanga	Sidhartha Nagar	U.P.	1200
8	Adam Ansari	Farsoli	Kushinagar	U.P.	1000
9	Mahboob Ali	Farsoli	Kushinagar	U.P.	1000
10	Mustafin	Farsoli	Kushinagar	U.P.	800
11	Ataudin	Kushmi	Kushinagar	U.P.	1000
12	Anilkumar Jaiswal	Chithori Bazar	Kushinagar	U.P.	3000
13	Mantu	Ghulata	Kushinagar	U.P.	3000
14	Samsad Ahmed	Dharbanga	Kushinagar	U.P.	500
15	K. Mazumdar	Haddour	24 Parganas(N)	WB	2000
16	Nirman Basu	Vahnipur	24 Parganas(N)	WB	600
17	Opul Mandal	Vahnipur	24 Parganas(N)	WB	800
18	Manoranjan Das	Vahnipur	24 Parganas(N)	WB	500
19	Manas Kumar Dev	Shipur	24 Parganas(S)	WB	2400
20	Jamal Bag	Shipur	24 Parganas(S)	WB	600
21	Yusuf Mir	Shipur	24 Parganas(S)	WB	300
22	Md. Yunus Mallick	Hokultanga	24 Parganas(S)	WB	800
23	Echaj Mir	Hokultanga	24 Parganas(S)	WB	500

Annexure - B-C

Statewise details of cycle vendors (Perrywala) visited by the Study Team

S.No.	Name of the Vendor	Village	District	State	No. of birds sold per day	No. of working days per month	No. of villages covered
1	Aminullah	Pachegoa	Sidhartha Nagar	UP	50	20	5-8
2	Alladdin	Kumathis	Kushinagar	UP	120-125	20	5-10
3	Mubark	Bhadwa Chapar	Kushinagar	UP	30-40	25	20
4	Mahboob Ali	Parcholi	Kushinagar	UP	120	21	10
5	Sagir Ali	Banava Chapa	Kushinagar	UP	40-60	25	8
6	Sonathan Misra	Hazatpur	24 Parganas (S)	WB	50-60	24	4-5
7	Chopan Chakravarthi	Madia Colony	24 Parganas (N)	WB	70	15	8-10

Annexure - II-D

Statewise Rural Poultry Units visited by the Study Team

S.No	Name of the farmer	Village	District	State	No. of birds rearing
1	Md.Hussain	Khekhagur	Siddhartha Nagar	UP	100
2	Md.Ali	Pachegoa	-do-	UP	15
3	Noorullah	-do-	-do-	UP	60
4	Rafiqullah	Bilohi	-do-	UP	12
5	Manaskumar Dev	Shivpur	24 Parganas (S)	WB	300

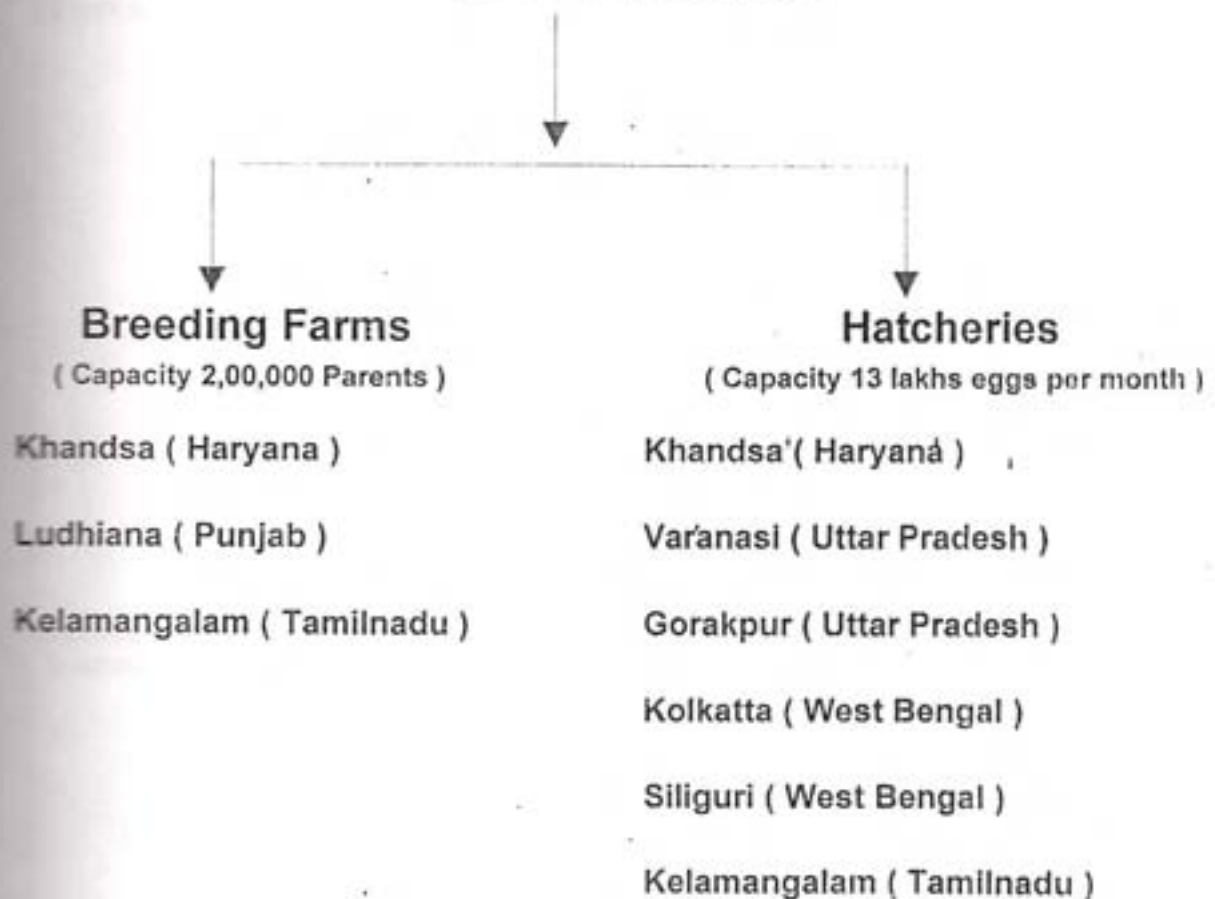
COMPARATIVE PERFORMANCE OF IMPROVED COMMERCIAL STRAINS OF POULTRY WITH LOW INPUT TECHNOLOGY

Sr No.	Parameters	Dual purpose					Layers	Broilers
		PDP Hyderabad	Jabalpur	UAS Bangalore	Kegg Farms Gurugaoon	AVM - Hatcheries Coimbatore	CPSP, Cutack	CPSP, Chandgarh
1	2	3	4	5	6	7	8	9
3	Breed / Strain	VANARAJA	KRISHNA	GIRIRAJA	KUROILER	Coloured birds	KALINGA BROWN	CHADRO
	Broilers							
1	Body weight at marketable age (gms)	--	1000 (22 weeks)	2000 (12 weeks)	1000 (60 days)	--	--	1400 - 1500
2	Feed consumption at marketable age (g)	--	--	--	1000 (Scavenging)	--	--	3500
3	Feed Conversion Rates (FCR)	--	--	--	1.00 : 1	--	--	2.5 : 1
4	Livability %	NA	NA	95	94	90	--	97
5	Dressing percentage with skin	60-65	65	--	70	60	--	74
	without skin	--	--	--	60	75	--	68
		--	--	--	--	--	--	--
		--	--	--	--	--	--	--
	LAYERS	--	--	--	--	--	--	--
1	Age at sexual maturity (days)	170-180	153	180-210	--	120	122	--
2	Mortality-Chick stage	--	4.7	2-3	3	0.5	4	--
	Grower stage	--	5.2	2-3	3-5	2	4	--
	Layer stage	--	4.8	2-3	6-9	1month	5.5	--
3	Feed consumption-Chick stage -->	--	--	--	500 g /4 wks.	--	NA	--
	Grower stage	--	--	--	20 g / day (scavenging)	--	NA	--
	Layer stage	--	--	--	30 g / day (scavenging)	--	115 G. / day	--
4	Egg Production / bird Hen housed	120-140	230 (intensive)	130-160	140-160	200	265	--
	Hen day	--	180 (semi intensive)	--	--	--	272	--
5	Egg weight (gms)	55-60	51	55-65	50-55	50	54	--

CENTRALLY SPONSORED SCHEME : "Assistance to State Poultry Farms"

S.No.	State	Name & location of the farm
1	Manipur	a) Broiler Production Farm at Porampat b) Central Poultry Farm, Mantripukhri, Imphal
2	Sikkim	a) Central Farm, Karfectar b) Poultry Farm Complex, Chujachen, East District
3	Meghalaya	a) State Poultry Farm, Umsning, Ri-Bhoi District b) State Poultry Farm, Rong Khon, Tura
4	Mizoram	a) Regional Broiler Chick Farm, Tanhril b) Poultry farm cum hatchery, Selesih
5	Nagaland	a) State Poultry Farm, Kohima b) State Poultry Farm, Dimapur c) State Poultry Farm, Mokokchung
6	Tripura	a) Regional Exotic Duck Breeding Farm, R.K. Nagar, Tripura (West) b) State Poultry Farm, Gandhigram c) Duck Breeding Unit of the Devipur Farm Complex, Devipur
7	Arunachal Pradesh	a) Central Poultry Farm, Nirjuli b) District Poultry Center, Tezu, Lohit District
8	Assam	Central Chick Rearing Farm, Khanapara
9	Chhatisgarh	State Government hatchery, Vaikunthpur (Koria District)
10	Uttaranchal	Poultry Farm 'Pashulok', Rishikesh
11	Uttar Pradesh	State Duck Farm, Chargawh, Gorakhpur
12	West Bengal	a) Duck Breeding Farm, GObardanga b) State Poultry Farm, Ranaghat (Nadia District)
13	Kerala	Central Hatchery, Chengannur
14	Jharkhand	Regional Poultry Farm, Hotwar, Ranchi
15	Himachal Pradesh	Central Poultry Farm, Nahan
16	Bihar	Poultry Farm, Bhagalpur
17	Madhya Pradesh	Poultry Farm, Shahadol

KEGG FARMS



ANNEXURE VI

Region-wise / district-wise distribution of dealers, mother units and sale of kuroiler chicks- KeggFarms

No.	Region	States	Districts	Distribution staff	No. Dealers	Mother units	Sale of DOC/ Month '000		
1	Khandsa	U.P.	Najibabad	1	-	25	25		
			Meerut	1	1	25	25		
			Etawa	1	1	30	30		
			Lucknow			40	40		
		Punjab	Allahabad						
			Amritsar	1	2	10	25		
2	Purvanchal	UP	Azamgarh	-	3	18	20		
			Mau	-	2	25	25		
			Deoria	-	1	-	5		
			Gorakhpur	-	-	12	15		
			Maharajganj	-	-	10	10		
			Kushinagar	-	4	45	35		
			Siddharthnagar	1	2	25	20		
			Faizabad	-	1	10	10		
			Gonda	1	4	45	40		
			Basti	-	1	10	10		
			Bihar	Gopalganj	-	-	6	05	
				Sewan	1	2	14	10	
		Chapra		-	1	15	10		
		Champan E		-	2	45	35		
		Champan W		-	2	30	25		
		Hazipur		-	1	7	05		
		Samastipur		-	1	14	10		
		3	Varanasi	U.P.	Varanasi	1	2	38	30
					Mirzapur	1	2	24	30
Chandauli					2	10	06		
Jaunpur	1				6	40	20		
Gazipur					2	10	08		
Bhalor	1				5	28	17		
Lucknow	1				2	06	07		
Sultanpur	-				1	02	09		
Akbarpur	-				6	29	15		
Shajanpur	-				2	10	07		
Bihar	Nalanda				-	2	05	06	
	Patna				1	2	04	10	
	Aurangabad			-	2	07	04		
	Bhabua			-	2	15	06		
Chattisgar	Sarjiuga			-	2	05	06		

		MP	Bilaspur Jabalpur Shahdol Satna	1 - - -	1 1 1 1	15 03 02 02	10 05 06 02
		Jharkhand	Garwaha Palamau	1 -	1 1	03 30	02 20
4	Dev.Region	U.P	Rampur Shahjahanpur Bareilly Pilibhit	} - - -	2 - - -	15 05	50 10
		Uttaranchal	Kashipur Rudrapur Haldwani Khatema Banbassa Janakpur	} - - - - - - }	3 3 1 - - - -	10 10 10 05	50 30 10
5	Eastern Region	West Bengal	24Parganas (S) 24Parganas (N) Midnapore Musheerabad Behum Bakura Punolia Nadia Hooghly Burdwan	1 2 1 1 - - - - - - -	7 13 5 2 3 2 1 5 3 2	50 80 130 20 2 6 5 18 10 10	40 70 100 20 5 6 5 15 10 7
		JharKhand	Ranchi Jamshedpur Dhanbad Dhunka	2(Purulia) - - -	1 1 2 1	10 4 12 2	10 8 10 2
		Bihar	Sasaram Barauni Samastipur Khagadva Bhagalpur	1 - - - -	1 2 1 1 1	4 6 1 6 5	4 5 2 5 5
		Orissa	Cuttack Balasinor Bhadrak Kheonjar Dhenkanal Sambalpur	1 - - - - -	2 1 1 1 1 1	12 1 1 2 2 2	10 2 2 2 2 2
		Mizoram Nagaland	Aizwal Dimapur	- -	2 2	5 5	6 7

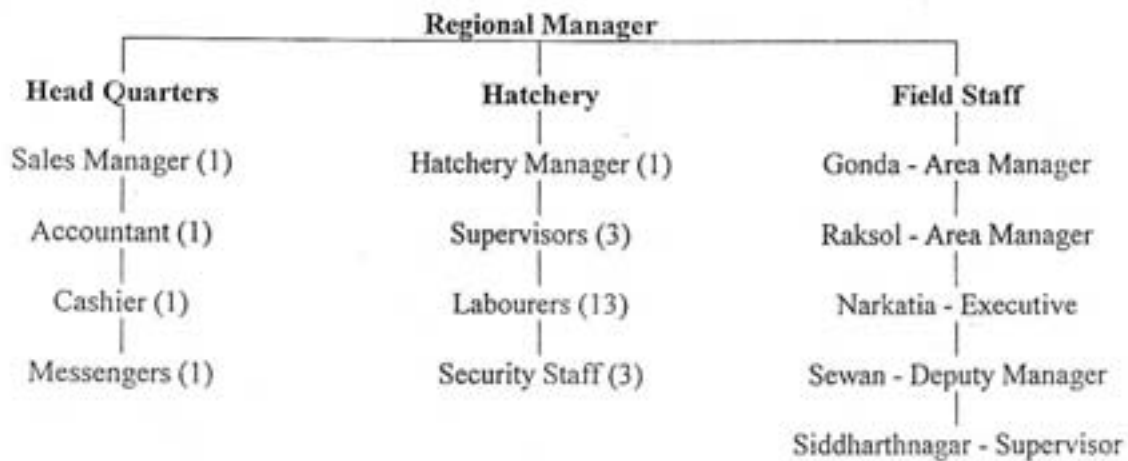
		Assam	Guwahati	-	1	3	7
		Manipur	Imphal	-	1	4	7
6	Southern Region	TamilNadu	Dharmapuri	1	45	35	45
			Salem	-	05	05	05
			Coimbatore	-	05	25	40
			N.Arcot	-	05	05	10
			Peryar	-	05	10	20
		Karnataka	Mysore	-	16	05	15
			Mangalore	-	02	02	05
Tumkur	-		02	01	01		
		Kerala	Calicut Cannanore Thiruvananthapuram Ernakulam Kottayam quilon	NA	NA	5 5 5 5 5 5	} 35

By way of summing up it may be mentioned that;

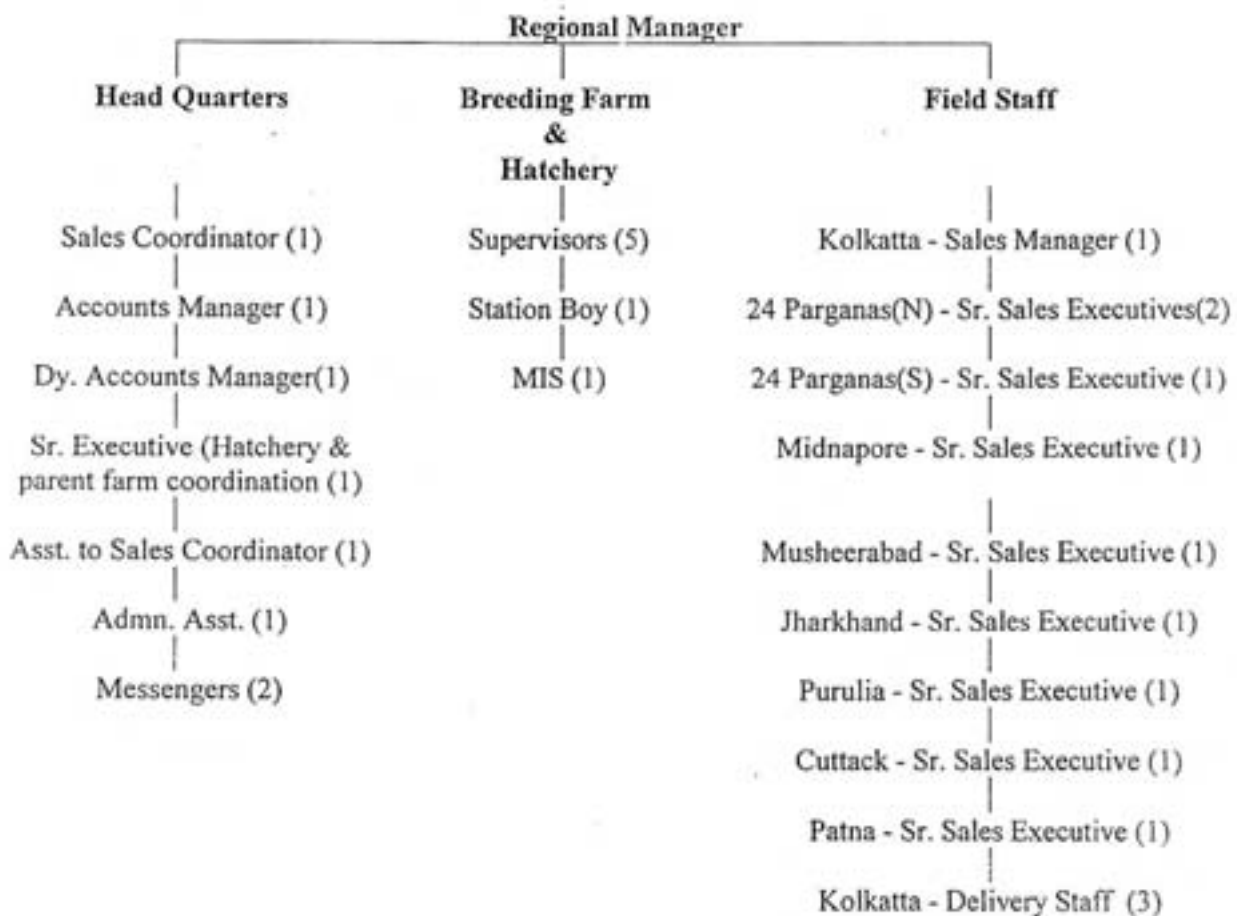
1. The present market capacity (existing market as being serviced by Keggfarms) is around 15 Lac chicks per month
2. The only organization producing and distributing 'Rural Specific' poultry on an organized basis is Keggfarms
3. The main areas covered by Kegg Farms are West and East U.P. the plains of Uttaranchal, parts of Bihar, Jharkhand, Chattisgarh, Madhya Pradesh, West Bengal, Orissa, North East States, Tamil Nadu and Kerala

**Regional Officewise Organisational Setup and Manpower
for Developmental Work - Kegg Farms**

A. Purvanchal Region, Gorakhpur



B. Eastern Region, Kolkatta.



Economics of Mother Units (2000 DOCs) - Investment Cost

		(Amt. in Rs.)	
		Thatched roof @ Rs.35 /s.ft.35000	Asbestos roof @65/sft. 65000
A. Fixed Costs			
(1) Shed - 1000 sft.			
(2) Equipment Cost Feeders - 40 @ Rs. 80/feeders			
Waterers - 20 @ Rs.50 / Waterer		5000	5000
(3) Misc. - Rs. 800/-			
Sub Total		40000	70000
B. Recurring Cost (For one batch of 2000 birds)			
(a) Cost of DOCs 2000 @ Rs.8.5 / chick		17000	17000
(b) Feed upto 30 days @ 700 gm / bird @ Rs.9 / kg.		12600	12600
(c) Medicine, vaccine - @ Re. 1 / bird		2000	2000
(d) Misc. expenditure litter, electricity, kerosine etc. @ Rs. 0.50 / bird		1000	1000
Sub Total		32600	32600
C. Total Cost (A+B)		72600	102600
D. Margin Money 10%		7260	10260
E. BANK LOAN 90%		65340	92340
i.e.		65300	92300

herD/HeggFarm/Docs-2000

Economics of Mother Unit - Techno Economic Parameters

1	Shed space required per bird	0.5 sft.
2	Shed construction cost - Asbestos Sheet Roof Thatched Shed	Rs. 65 / sft. Rs. 35 / sft.
3	Equipment Cost / bird (local make)	Rs. 2.5
4	No. of DOCs purchased per batch	2000
5	Purchase price of chicks (Rs.)	8.50
6	Mortality rate	4%
7	Feed requirement upto 30 days period	700 gm / bird
8	Feed cost per kg.	Rs. 9
9	Cost of Medicine, vaccines etc. (per / bird)	Rs. 1.00
10	Misc. expenditure - litter, electricity (kerosine) etc. (per/bird)	Rs. 0.50
11	No. of batches reared - first year	7
	- second year onwards	9
12	Sale price of growers	Rs. 20 / bird
13	Sale of manure (Rs.)	0.50 / bird
14	Maintenance Cost of Sheds Thatched (second year) Asbestos	Rs. 1000/ annum NIL
15	Depreciation on Sheds and Equipment Shed - Thatched Asbestos Equipment	10% 5% 10%
16	Rate of Interest	12%
17	Repayment period	4 years
18	Grace Period	NIL

Annexure - VIII (c)

Economics of Mother Unit Flock Schedule

Batch No.	Date of purchase of DOCs	Date of sale of growers	Cleaning period upto (10 days)
1	January 01	January 30	February 9
2	February 10	March 11	March 21
3	March 22	April 20	April 30
4	May 1	May 30	June 9
5	June 10	July 9	July 19
6	July 20	August 18	August 28
7	August 29	September 27	October 7
8	October 8	November 6	November 16
9	November 17	December 16	December 26

First year : 7 batches of chicks can be reared as construction of poultry sheds would take 2-3 months time.

Second year : onwards 9 batches of chicks can be reared as per the flock schedule.

Economics of Mother Unit - Income & Expenditure Statement

Annexure - VIII (d)

Sr. No.	Parameter	I	II	III	IV	V
A.	Income					
	i) Sale of growers - 1920/batch	268800	345600	345600	345600	345600
	ii) Sale of Manure - 0.50 / bird	7000	9000	9000	9000	9000
	Total	275800	354600	354600	354600	354600
B.	Expenditure					
	i) Purchase of DOC - 2000/batch	102000*	153000	153000	153000	153000
	ii) Feed Cost - 700 gm/bird @Rs.9.00 / kg.	75600*	113400	113400	113400	113400
	iii) Medicines & Vaccine Cost @ Rs.1.00/bird	12000*	18000	18000	18000	18000
	iv) Misc Items - letter, kerosines, elect. etc. @ 0.50 / bird	6000*	9000	9000	9000	9000
	v) Repairs & Maintenance of shed					
	Thatched	--	1000	1000	1000	1000
	Asbestos	--	--	--	--	--
	Total					
	Thatched Shed	195600	294400	294400	294400	294400
	Asbestos Shed	195600	293400	293400	293400	293400
C.	Gross Surplus					
	Thatched shed	80200	60200	60200	60200	60200
	Asbestos shed	80200	61200	61200	61200	61200

* Other than capitalised cost

Annexure VIII (e)

Economics of Mother Unit - Repayment Schedule

Interest 12%
 Repayment : 4 years
 CRF 0.329

Year	Thatched Shed			Asbestos Shed		
	Gross Surplus	Loan Instalment	Net Surplus	Gross Surplus	Loan Instalment	Net Surplus
1	80200	21483	58717	80200	30367	49833
2	80200	21483	38717	61200	30367	30833
3	80200	21483	38717	61200	30367	30833
4	80200	21483	38717	61200	30367	30833

Economics of cycle vendors (Perriwala)

		(Amt. Rs.)
A. Investment Cost		
1	Cost of cycle	1600
2	Cost of Basket / Cage	200
3	Cost of feeder / waterer	50
4	Cost of feed (3kg / @ Rs.9/ kg.)	27
	Total Cost	1877
	Margin Money 10%	177
	Bank Loan	1700

B. Techno-economic parameters

1	Number of villages covered	6-8
2	Distance covered (km)	50-60
3	Number of days of work available/ month	20 days/month
4	Number of birds sold / month	500
5	Purchase price of birds (3-4 weeks old) Rs. per bird	20
6	Sale price of birds (3-4 weeks old) Rs. per bird	24
7	Maintenance cost of cycle (Rs./month)	60
8	Wages (Rs./day)	50
9	Expenditure on food (Rs. / day)	20
10	Expenditure on feed (gms/bird)	50
11	Expected life of cycle	3 years
12	Rate of Interest	12%

C. Economics

Particulars	Years		
	I	II	III
A. Income :			
Sale of birds - 6000 birds @ Rs.24 / bird	144000	144000	144000
B. Expenditure :			
1 Cost of purchase of birds - 6000 @ Rs.20/ bird	120000	120000	120000
2 Maintenance cost of cycle @ 60 / month	720	720	720
3 Feed for birds @ 50 gm/bird	2700	2700	2700
4 Wages @ Rs.50 / day for 240 days	12000	12000	12000
5 Expenditure on Food @Rs.20/day for 240 days	4800	4800	4800
C Total expenditure	140220	140220	140220
D Gross surplus	3780	3780	3780
E Repayment of loan			
Principal	600	600	500
Interest	204	132	60
F Net Surplus	2976	2976	2976

Economics of Rural Poultry Unit
Unit size = 20 birds under scavenging conditions

Model- 1 Mixed type (Meat and egg purpose)

	<i>Amt. (Rs.)</i>
A. <u>Investment cost</u>	
i) Cost of small nest for night shelter	200
ii) Feeders and waterers	100
Sub Total	<u>300</u>
B. <u>Recurring cost capitalized</u>	
i) Cost of 4 week old growers- 20 nos @ Rs.24/bird	480
ii) Cost of Supplementary Feed	702
Sub Total	1182
C. Total	1482 i.e.1500
D. Margin Money (10%)	150
E. Bank Loan (90%)	1350

Techno-economic parameters

1	No. of 4 week old growers purchased/annum	10 males & 10 females
2	Supplementay feed required/ bird upto 4 months of rearing	20 gms/day
3	Supplementary feed required/ bird from 5th month onwards	30 gms/day
4	No. of kgs of feed required up to 4th month of rearing for 20 birds	216
5	No. of kgs of feed required from 5th-12th months of 5th month of rearing of 10 female birds	486
6	Cost of supplementary feed-locally available	Rs.6/kg

7	Total feed cost of birds during 1 year period	Rs.702
8	Weight of male bird at end of 4th month of rearing period	1.5 kg
9	Weight of female bird at the time of culling (Rearing of 11 - 12 months)	2 kg
10	Egg production during 7 months laying period (egg production starts at 7 months of age)	90 /bird
11	Cost of each egg	Rs.2
12	Sale price of male bird	Rs.60/kg
13	Sale price of female birds after laying period	Rs.50/kg
14	Mortality rate of birds	10%
15	Eggs consumed by the households	20% of production

Economics

S.No.	Items	Years		
		I	II	III
A. Income				
	Sale of birds			
	Male-9	810	810	810
	Female-9	900	900	900
	648 eggs/ @Rs. 2/egg	1296	1296	1296
	Sub Total	3006	3006	3006
B. Expenditure				
a)	Cost of birds	480	480	480
b)	Cost of Feed	702	702	702
	Sub Total	1182	1182	1182
C. Gross Surplus		1824	1824	1824
D. Repayment of loan				
	Principal	450	450	450
	Interest	162	108	54
E. Net Surplus		1212	1266	1320

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Model 2 : Rearing for Meat purpose

A) <u>Investment cost</u>	Amount (Rs.)
i) Cost of small nest of night shelter	200
ii) Cost of feeders and waterers	100
Sub Total	<u>300</u>
B) <u>Recurring Cost</u>	<u>—</u>
i) Cost of 4 weeks old growers 20 Nos.@Rs.24/bird	480
ii) Cost of feed - 1 kg/bird upto 45-50 days @ Rs.6/kg for 20 birds	120
Sub total	<u>600</u>
C) Total Cost	900
D) Margin money (10%)	90
E) Bank loan (90%)	810

Techno-economic Parameters

1. No. of growers purchased at 4 weeks old	20 birds
2. Cost of each grower at 4 weeks old	Rs.24
3. Feed requirement upto 45-50 days under scavenging condition	1 kg/bird
4. Cost of Feed	Rs. 6.00/kg.
5. Weight of each grower at the end of 45-50 days of rearing	1 kg
5. Cost of 1 kg weight grower	Rs.60
6. Mortality upto rearing period of 45-50 days	5%
7. No. of growers sold per batch after 45-50 days of rearing	19
8. No. of batches that can be reared in a year	6

Economics

S.No.	Particulars	Year		
		I	II	III
A)	Income			
	Sale of birds – 6 batches @ 19 birds /batch	6840	6840	6840
B)	Expenditure			
i)	Cost of 6 batches of growers - 20/batch @ Rs.24 per bird	2880	2880	2880
ii)	Cost of feed @ 1 kg/bird for 6 batches	720	720	720
		3600	3600	3600
C)	Gross Surplus	3240	3240	3240
D)	Repayment schedule			
	Payment of Principal	270	270	270
	Payment of interest	97	65	32
E)	Net surplus	2873	2905	2938