

Draft Report

EVALUATION OF THE PERFORMANCE OF RURAL BACKYARD POULTRY FARMING IN KARNATAKA

Submitted to

Karnataka Evaluation Authority (KEA)

Government of Karnataka

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**EVALUATION OF THE PERFORMANCE OF RURAL
BACKYARD POULTRY FARMING IN KARNATAKA
IMPLEMENTED BY DEPARTMENT OF ANIMAL
HUSBANDRY AND VETERINARY SERVICES**

**EXTERNAL
EVALUATION**



ಕರ್ನಾಟಕ ಮೌಲ್ಯಮಾಪನ ಪ್ರಾಧಿಕಾರ
Karnataka Evaluation Authority

**STUDY CONDUCTED FOR
KARNATAKA EVALUATION AUTHORITY
AND
DEPARTMENT OF ANIMAL HUSBANDRY AND
VETERINARY SERVICES,
GOVERNMENT OF KARNATAKA**

BY

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PREFACE

The Rural Backyard Poultry Development is a Centrally sponsored Scheme implemented by the Department of Animal Husbandry and Veterinary Services Government of Karnataka in six districts of Bangalore Rural, Bangalore Urban, Ramanagara, Mandya, Tumakuru and Shivamogga in Karnataka State. The study 'Evaluation of the Performance of Rural Backyard Poultry Farming in Karnataka' was initiated by the Department of Animal Husbandry and Veterinary Sciences through Karnataka Evaluation Authority (KEA). The study is outsourced by KEA to the ECO NABCONS. A sample of 247 beneficiaries was selected for the study. The findings of the study indicate that the objectives of the Scheme viz. - livelihood stability and nutritional security are achieved up to certain extent and the scheme can harness the commercial potential through establishment of small and self sustainable poultry enterprises by the rural poor.

I expect that the findings and recommendations of the evaluation study will be useful to the Department to implement the scheme more effectively for the rural poor.

The study received support and guidance of the Principal Secretary and the Secretary Planning, Programme Monitoring and Statistics Department, Government of Karnataka. The review of the draft report by members of the Technical Committee of KEA, and an Independent Assessor, has provided useful insights and suggestions to improve the draft report. I duly acknowledge the assistance rendered by all in successful completion of the study.


Chief Evaluation Officer
Karnataka Evaluation Authority

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List of Acronyms and abbreviations

AD	Assistant Director
AH & VS	Animal Husbandry and Veterinary Services.
AICRP	All India Coordinated Research Project.
BPL	Below Poverty Line
CARI	Central Avian Research Institute
CPDO	Central Poultry Development Organization
CPDO & TI	Central Poultry Development Organization and Training Institute
CSS	Centrally Sponsored Scheme
DAH&D	Department of Animal Husbandry and Dairying
DAH&VS	Department of Animal Husbandry and Veterinary Services
DD	Deputy Director
DOC	Day Old Chicks
FOB	Free On Board
FOR	Free On Road
FYP	Five Year Plan
GOI	Government of India
GOK	Government of Karnataka
GP	Gram Panchyat
H.D.	Hen Day
ICAR	Indian Council of Agricultural Research
ICMR	Indian Council of Medical Research
KEA	Karnataka Evaluation Authority
KVA&FSU	Karnataka Veterinary Animal and Fisheries Sciences University
KVK	Krishi Vigyan Kendra
LIT	Low Input Technology
MOA	Ministry of Agriculture
NECC	National Egg Coordination Committee
NICRA	National Initiative on Climate Resilient Agriculture
PEC	Poultry Extension Centre
PPP	Public Private Partnership
RBY	Rural Backyard Poultry
RPF	Request for Proposal/Regional Poultry Farm
SHG	Self Help Groups
SME	Small and Medium Enterprises
SPF	State Poultry Farm
TOR	Terms of Reference
VHL	Venkateshwara Hatcheries Limited

Executive Summary

The Centrally Sponsored Rural Backyard Poultry Development Scheme of the Department of Animal Husbandry and Dairying (DAH&D) of the Ministry of Agriculture (MOA), Government of India (GOI), was implemented by the Department of Animal Husbandry and Veterinary Services (DAH&VS) of the Government of Karnataka (GOK) since 2011 in six districts (Bengaluru Rural, Bengaluru Urban, Ramanagara, Mandya, Tumakuru and Shivamogga) of the State. The total number of beneficiaries covered during the three year period from 2012-13 to 2014-2015 is 8731 (1743, 3371 and 3617 in the three financial years respectively).

Under the scheme, Low Input Technology (LIT) Breeding Stock maintained and reared by State Poultry Farms (SPFs) is distributed to Below Poverty Line (BPL) beneficiaries. As per the GOI letter number 43-8/2011-LDT (P) dated 04-07-2011 (Annexure A), an amount of Rs 240.50 lakh for 10500 BPL beneficiaries was recommended for release. Each BPL beneficiary family is given 45 Giriraja birds (fowls) in three installments of 20, 15 and 10 birds after checking the progress, at 16th and 32nd week.

The Government of Karnataka decided to evaluate the performance of the said scheme through Karnataka Evaluation Authority (KEA). KEA allotted the evaluation study to NABCONS, a wholly owned subsidiary of NABARD.

The main objectives and purposes of the study are to find/evaluate:

- a. Whether the scheme is reaching out to the BPL families?
- b. What is the performance of the Giriraja bird?
- c. Whether the nutritional and financial status of beneficiary improved?
- d. Whether it will be prudent to require the beneficiary to contribute towards cost of the bird?
- e. What changes are to be suggested for better implementation of the scheme?

The field study was conducted in the month of December 2015 (from 02.12.2015 to 30.12.2015) covering 247 sampled beneficiaries from 10 Taluks of the six Districts of the State where the scheme is being implemented. The major findings of the study are summarized below:

1. Adherence to major scheme guidelines

There was a wide variation in scheme implementation in almost all the parameters. Scheme specific, clear cut operational guidelines were not issued by State Directorate, Bengaluru. As far as the selection of beneficiaries is concerned, three out of the 247 selected sampled beneficiaries did not belong to BPL category. The selection of the beneficiaries was not done through Gram Sabha in all Taluks as envisaged in guidelines and section 3(A) (3) (c) of the Karnataka Panchayat Raj Act 1993. The cluster areas/pockets/Taluks/districts, selected/identified for scheme implementation were from commercially/industrially developed areas contrary to one of the selection criteria. In terms of checklists enclosed to GOI letter no. 43-23/2009-LDT (P) dated 26.04.2011 cluster area/pockets to be selected should be the ones where only unorganized sector is present and no commercial, industrial or even Semi is not present. The scheme results were not encouraging in the better developed areas e.g. Bengaluru North Taluk of Bengaluru Urban district. Training was not organized for the beneficiaries as well as staff of the AH & VS Department before implementing the scheme and distribution of birds. Proper selection and training of farmers would have resulted in better impact. The birds were sourced from a public sector organization (State Poultry Farms) except in Madhugiri Taluk where, one third of the birds distributed were sourced from a private party.

2. Supply of inputs

The interval between supply of batches, batch sizes and total birds supplied per family were not as per the scheme guidelines. 85% of the sampled beneficiaries did not get 45 birds as envisaged under the scheme. The other inputs namely bio shelter, feeders, waterers etc. were not supplied at all.

3. Follow up by the Department on health and life of birds

Although the department officials claimed that regular follow-up of the scheme was done, its impact of follow up was not visible. Beneficiaries maintained no follow up was done by the department.

4. Production performance

The Giriraja bird didn't perform up to the standards claimed/publicized. The average body weight of adult males and females (24 weeks) was 3.53 Kg. and 3.16 Kg., respectively and the average egg production per Giriraja hen was 104 eggs/year. These were lesser than the figures published by UAS Hebbal, regarding weight of adult male, adult female and annual egg production being 4.5 Kg, 3.5 Kg and 140 eggs, respectively. The average body weights of males and females, as also egg production differed significantly at 1% level of significance. The average egg weight was 64 gm as against 65 gm claimed in UAS leaflet. This difference was also significant at 1% level of significance.

5. Mortality

The major causes of bird mortality were predation (23%) and diseases, including stress (27% of all mortality). In stray cases (Maddur Taluk) there was high mortality due to overcrowding while transporting the birds from Taluk Headquarters to the beneficiary's villages.

6. Scheme Benefits

The nutritional and financial status of the family is believed to have improved result of scheme. But it was not possible to measure and report the extent to which this happened in the evaluation. The income from meat (including spent hens) was higher than from eggs.

7. Radiatory/Demonstration effect

The scheme didn't motivate other people in the beneficiaries' neighborhood to take up the backyard poultry farming with improved fowl (Giriraja).

8. Self-sustainability of the enterprise

All the beneficiaries expressed their willingness to continue with the Giriraja birds, provided the birds and other support services are made available.

9. Utilization of progeny of birds

Giriraja is a synthetic strain of poultry and cannot breed true in farmers' fields. The hens are poor sitters. Hence, ideally, it is alright, if the farmers have to depend on breeders/intermediaries for replacement/parent stock/fertile hatching eggs.

10. The good and bad qualities of Giriraja

The good qualities indicated by the beneficiaries include, inter alia, better/faster growth, higher body weight gain, bigger sized eggs, premium price for both meat and eggs, higher production of both meat and eggs, better taste of meat, early maturity, and persistency in laying.

The beneficiaries also indicated that the Giriraja birds are sluggish/ lazy, have strong smell and always required attention. Beneficiaries also opined that Giriraja birds are prone to predators due to lack of self-protection ability. It was felt by the beneficiaries that Giriraja birds have low resistance power against diseases.

11. Performance of the scheme since inception

During the three year implementation period, 1.79 lakh birds were distributed in six districts of the State. Out of these districts, data on target was not available for two districts viz. Bengaluru Rural and Bengaluru Urban. In the remaining four districts the overall achievement was 55% with reference to number of families covered, and 35% with reference to number of birds distributed. The aggregate target for supply of birds in these four districts was 2, 90,475 birds (6455 families @ 45 birds per family). Against this 1, 00,655 birds were supplied. Out of the 247 families only 36 families (around 15%) received a total of 45 birds i.e. full quota envisaged under the scheme.

12. Improvement in scheme implementation

There is a lot of scope for improving the scheme implementation for its success. The major areas could be proper selection of beneficiaries and scheme area, capacity building of

beneficiaries/ departmental staff, adequate arrangement for transport of birds, extension and health services. There is a need for privatization of extension and bird health services.

13. Continuity of the scheme

Notwithstanding the deficiencies observed in scheme implementation, the programme is worth up scaling in the State of Karnataka as it resulted in nutritional and economic wellbeing of the BPL families. Incidentally GOK has proposed to implement the scheme for distribution of Giriraja for all the 27 districts excluding Mandya, Tumakuru and Shivamogga on 75%-Central share and State 25% share. (Annual Administration Report 2014-15 of DAH&VS, para 3, page no. 66)

14. Backyard poultry on entrepreneur mode

Out of the 247 beneficiaries except one all others expressed their willingness to contribute their own margin ranging from 20-50% of the cost involved. Thus, there is a huge scope for up scaling the scheme through entrepreneurial mode.

Chapter 1

Introduction, Contextual Background and Sector History

1.1 Poultry in the State of Karnataka

The total layer population estimated during 2014-15 was 207.71 lakh out of which 149.58 lakh (139.11 lakh in 2013-14) were improved layers and 58.13 lakh (59.87 lakh in 2013-14) were desi birds. The share of desi layers was around 28% in total estimated layer population during 2014-15. There are more than 40 hatcheries in Karnataka producing about 400 lakh broiler chicks and 96 lakh layer chicks per year. Day Old Chicks (DOC) needs of the commercial farms are mainly met by the private sector. Broiler farming is mostly through contract farming by the companies like Suguna, VHL, Godrej, Komala, CP farms, Shanti Poultry etc. The estimated egg production during 2014-15 was 43948 lakh indicating an increase of 6.61% over the previous year's production. About 87% and 13% of the egg production was from improved birds and desi birds, respectively. The per capita availability of eggs in the State during 2014-15 is 72, up from 66 during the year 2013-14, which is still very low compared to the ICMR's recommended consumption of 180 eggs per person per annum. Marketing of eggs is through private channels and it is based on the declared rates of National Eggs Co-ordination Committee (NECC). Broiler marketing is through contract route. The broiler meat production during 2014-15 was 82,615 tonnes as against 81,828 tonnes produced during the year 2013-14, indicating a marginal increase of 0.96% over previous year. Broiler meat comprises 45% of the total meat produced in the State. The total installed capacity, as on 31.03.2015, for production of poultry and livestock feed in the State by 76 licensed feed manufacturers is 25.88 Lakh Metric Tonnes which is marketed by 29 licensed feed dealers.

1.2 Backyard Poultry: Overall National scenario

Though poultry development in the country has taken a quantum leap in the last three decades, the growth has been mainly restricted to commercial poultry. Rural backyard poultry, though still contributing nearly 30% to the national egg production, is the most

neglected one. This is in spite of the fact that their poultry eggs and meat fetch a much higher price than that from commercial poultry. 70% of the poultry products and eggs are consumed in urban and semi urban areas and the rural consumption is quite low. Private poultry producers are also not able to attend to the needs of major rural consumers and to the consumers of the northeastern states and other difficult regions. The major limiting factor in the way of increasing consumption of egg and poultry meat in rural area is poor availability. Most of the commercial poultry egg and meat production is centered in the urban and semi urban areas. Due to their operation being of an industrial nature, the private sector is not inclined to go to the rural areas, particularly to small farmers and landless farmers including women. The private commercial sector is understandably reluctant to enter the rural backyard poultry sector as they aim at higher and quick profits, through larger investments. The commercial poultry sector is doing business, through integrated approach of contract farming using high input and high output birds. For the poorest of the poor and the landless, the major issues are food security and risk spreading through subsidiary income, which are not addressed by the private commercial sector. It is well known fact that a fairly significant proportion of the landless and marginal farmers eke out their living from poultry and other small ruminants. Backyard poultry requiring hardly any infrastructure setup is a potent tool for upliftment of the poorest of the poor. Besides income generation, Rural Backyard Poultry provides nutrition supplementation in the form of valuable animal protein and empowers women. It has also been noticed that the demand for rural backyard poultry is quite high in tribal areas.

1.3 Backyard poultry in Karnataka:

1.3.1 As per the 19th Livestock census, Karnataka has about 534.42 lakh poultry (512.54 lakh in rural area and 2.19 lakh in urban areas) and 96.60 lakh fowl in backyard poultry comprising of 17.84 lakh cocks, 43.99 lakh hens and 34.77 lakh chicken below five months. The share of backyard fowl population in total fowl population was 11%. The State stands 7th in egg production and 10th in chicken meat production in the country.

1.3.2 The estimated number of desi layers in the state has increased from 47.73 lakh in 2005-06 to 58.13 lakh in 2014-15 as against the estimated number of improved layers at 55.09 lakh to 149.58 lakh over the ten year period. The percentage of desi layers to total layer population was 46 % in 2005-06 which declined to 35% in 2009-10 and further declined to 28% in 2014-15. Details in this regard are presented in Table No.1.

Table 1: Estimated number of layers from 2004-05 to 2014-15 in Karnataka

(In lakh)

Year	Number of layers				
	Desi	% Desi	Improved	% Improved	Total
2005-06	47.73	46	55.22	54	102.95
2006-07	48.69	44	60.82	56	109.51
2007-08	50.43	44	65.15	56	115.58
2008-09	50.30	39	79.45	61	129.75
2009-10	52.27	35	96.24	65	148.51
2010-11	54.51	35	101.08	65	155.59
2011-12	58.32	34	114.31	66	172.63
2012-13	59.19	33	122.22	67	181.41
2013-14	59.87	30	139.11	70	198.98
2014-15	58.13	28	149.58	72	207.71

Source: Integrated Sample Survey Report (2014-15) of DAH&VS, GoK.

1.3.3 Estimated average egg yield has increased for desi layers from 99 eggs per year in 2005-06 to 105 eggs per year in 2014-15 as against 246 eggs per year in 2005-06 to 253 eggs in 2014-15. The decadal growth in egg production per hen per year in case of desi layer was 6% as against 3% in case of Commercial farm layers. This indicates that there is better scope for improvement in case of desi layers as compared to commercial farm layers. Details in this regard are presented in Table No.2.

Table 2: Average egg yield per layer per year from 2004-05 to 2014-15 in Karnataka

(In numbers)

Year	Egg yield Desi layers	Egg yield Improved	Total egg yield
2005-06	99	246	178
2006-07	97	242	178
2007-08	95	239	177

Year	Egg yield Desi layers	Egg yield Improved	Total egg yield
2008-09	95	238	182
2009-10	100	248	196
2010-11	101	249	197
2011-12	103	251	201
2012-13	103	251	203
2013-14	103	252	207
2014-15	105	253	212

Source: Integrated Sample Survey Report (2014-15) of DAH&VS, GoK.

1.3.4 Estimated egg production from desi layers during 2005-06 was 4750 lakh eggs and has increased to 6104 lakh eggs showing a growth of 29.5%. However the estimated egg production for improved layers has increased from 13598 lakh eggs to 37844 eggs showing a growth of almost 2.75 times i.e. 188%. The percentage of eggs from desi layers to total egg production was 26% during 2005-06, which has decreased to 14% over 10 years and percentage of eggs from desi layers to total production is only 14% during 2014-15. Details in this regard are presented in Table No.3.

Table 3: Estimated egg production from 2004-05 to 2014-15 in Karnataka

(In lakh)					
Year	Desi	% Desi	Improved	% Improved	Total
2005-06	4750	26	13598	74	18348
2006-07	4740	24	14757	76	19497
2007-08	4815	24	15570	76	20385
2008-09	4799	20	18946	80	23745
2009-10	5225	18	23858	82	29083
2010-11	5505	18	25169	82	30674
2011-12	6007	17	28692	83	34699
2012-13	6096	17	30677	83	36773
2013-14	6167	15	35056	85	41223
2014-15	6104	14	37844	86	43948

Source: Integrated Sample Survey Report (2014-15) of DAH&VS, GoK.

1.3.5 The above slow growth in numbers, yield and production of desi layers compared to improved layers may be an indication of more focus towards production from improved layers i.e. commercial layers which is called as 'factory farming'. This may be one of the contributing

factors for rural areas of the state remaining deficient in nutritional status and also financially backward. Backyard poultry farming, which requires capital expenditure but very little running cost, is one method to set this right. Also, though poultry farming has developed into an industry, ecofriendly backyard poultry rearing is a profitable enterprise in providing regular income to the rural resource poor people and ensuring nutritional security. It still continues to be the livelihood proposition of several poor farmers in the rural areas and contributes 14% per cent of the total egg production in the state.

1.3.6 It may also be mentioned that groups of small rural producers cater to the needs of consumers who have a specific preference for colored birds and brown shelled eggs, both of which are mostly produced in the rural sector/ backyard poultry. Thus, there is a need to take up specific rural poultry production programmes, to meet the requirements of the rural consumers while constituting a source of subsistence income through a subsidiary occupation by taking up colored bird units ranging from 20 to 50 birds per family in their backyards. Such units require very little hand feeding and can give a fairly handsome return with bare minimum night shelter.

1.4 Backyard Poultry Development by Government sector in Karnataka:

1.4.1 Poultry Development in the State is carried out through 24 Institutions of the Department of Animal Husbandry & Veterinary Services (DAH&VS) in the State. The details of these institutions are as under.

- a. One State Poultry Breeding and Training Centre at Hessarghatta, Bengaluru.
- b. Two Regional Poultry Breeding and Training Centres at Malavalli and Gangavathi.
- c. Seven district Poultry Rearing and Training Centers at Davangere (Davanagere district), Kudige (Kodagu), Bidar (Bidar district), Vijayapura (Vijayapura district), Gundlupete (Chamarajanagar district), Mangalore (Dakshina Kannada district) and Kolar (Kolar district).
- d. Thirteen Poultry Rearing Centres at (1)Tumakuru, (2)Raichur, (3) Kumta (Uttara Kannada), (4)Kundapura (Udupi), (5)Ajjampura (Chickamagaluru), (6)Ponnampete (Kodagu), (7)Hassan, (8)Ramanagara, (9)Kurikuppe (Ballari), (10)Shivamogga. (11)T. Narasipura (Mysuru), (12) Holenarasipura (Hassan) and (13) Koila (Dakshina Kannada).
- e. Regional Laboratory at Bangarpete, Kolar district.

1.4.2 Poultry Development activities of DAH&VS: Poultry Development activities of DAH&VS include the following:

- i. Breeding and rearing of Giriraja parent stock of birds under the scientific breeding system, franchising with the Karnataka Veterinary Animal and Fisheries Sciences University (KVA&FSU), Veterinary College, Bengaluru.
- ii. Production and supply of day old ‘Giriraja’ chicks to the farmers and departmental rearing Centres.
- iii. Rearing and supply of ‘Giriraja birds’ of 4-6 weeks to beneficiaries under various socioeconomic schemes.
- iv. Imparting training in respect of modern poultry in both layers and broilers farming and preparation of project reports.

1.4.3 Backyard Poultry Development through Cooperative sector:

Karnataka Cooperative Poultry Federation Ltd., Bengaluru, a Federation of 100 Primary Poultry Cooperative Societies, is also engaged in promoting, production and sale of Giriraja chicks for supporting backyard poultry.

1.4.4 Role of Central Poultry Development Organization and Training institute (CPDO&TI) in Backyard Development in Karnataka:

In addition, Central Poultry Development Organization and Training institute (CPDO&TI) under Ministry of Agriculture, Department of Animal Husbandry & Dairying, Government of India is maintaining germplasm of low input technology birds and multiplication and development of these stocks and supply for rural poultry development programmes. CPDO&TI caters to the backyard poultry development needs of the Southern states of the country.

1.5 Giriraja bird:

1.5.1 The University of Agricultural Sciences, Bengaluru, the pioneer in developing a synthetic colored dual purpose strain of poultry, gave the name ‘Giriraja’ (in vernacular it means King/Lord of the Hills). Release of Giriraja variety can be viewed as the first initiative by poultry breeders to develop varieties suitable for backyard rearing. Giriraja can be viewed as by product of broiler breeding programme. The breeds viz. White Plymouth Rock, Red Cornish and New Hampshire were utilized to bring out the bird with color plumage, high egg production and body weight compared to local nondescript fowls and instantly became popular.

1.5.2 It is a strain that resembles the local fowl, is sturdy and resistant and acclimatizes itself to any region and weather. It requires no vaccine except ‘*Ranikhet*’ and yields high

quality and quantity of meat. Comparison between Giriraja and the native fowl are tabulated and furnished in Table No.4.

Table 4: Comparison between Giriraja and Native Fowl

Sl. no.	CHARACTER	GIRIRAJA	NATIVE FOWL
1	Body weight at 8 weeks of age in scavenging conditions.	1600-1700 gms	600-700 gms
2	Livability	98%	90%
3	Annual Egg production	140 to 150	70
4	Egg weight	55 to 65 gms	45 to 50 gms
5	Weight of Adult male	4.5 to 5.5 kg	2 to 2.5 kg
6	Weight of Adult female	3.5 to 4 kg	1.3 to 1.6 kg

The figures in the table above are as per the leaflet published by UAS, Hebbal, Bengaluru.

1.5.3 It is claimed that Giriraja hen commences laying eggs from the 16th week of age and continue to do so up to 73 weeks of age. In this period, the egg production is between 140 and 150. Thereafter, the bird becomes old and egg laying falls considerably.

Chapter 2

Objectives and Performance of the Programme

2.1 Objectives:

The Centrally Sponsored Rural Backyard Poultry Development Scheme of the Central Ministry of Agriculture, Department of Animal Husbandry, Dairying and Fisheries, has the major objective of enriching small farmers and landless labour families through a more holistic and self-reliant approach, not only in terms of improvement of income and employment but also in terms of improving their nutritional status using poultry as a tool. The key objectives of the programme are providing a subsidiary income generation and nutrition to the family. The department of Animal Husbandry and Veterinary Services (AH &VS) Government of Karnataka (GOK) has been implementing this Centrally Sponsored Scheme (CSS) since 2011. However, there was no progress during the first year (2011-12).

2.2 Target Groups and Nature of Assistance

2.2.1 The target groups intended are BPL households identified by the Gram Sabha.

2.2.2 As per para 6 of GOI letter number 43-8/2011-LDT (P) dated 04-07-2011, Low Input Technology (LIT) Breeding Stock maintained and reared by State Poultry Farms (SPFs) is to be distributed to BPL beneficiaries. As per Annexure A of the said letter, an amount of Rs 240.50 lakh for 10500 BPL beneficiaries was recommended for release which comprised Rs 78.75 lakh towards fixed costs for cages/night shelter and other inputs like feeders/drinkers etc. and Rs 141.75 lakh for birds (4,72,500 numbers). The unit rate per beneficiary worked out to Rs 750 towards fixed costs for 20 birds and Rs 1350 for 45 birds (@ Rs 30 per bird). As per Annexure IIB of GOI letter No. 43-23/2009-LDT (P) dated 26-04-2011, the 45 reared birds of 4 weeks age were to be given to BPL families in installments after checking progress at 16th and 32nd week the batch size being 20, 15 and 10 respectively. During the three year implementation period, GOK covered 8731 beneficiaries and distributed 1, 79,012 birds (around 20+ birds per beneficiary). Assistance was expected to be given under the scheme to

the tune of Rs. 4000/ beneficiary + Rs. 750/ beneficiary for bio secure night shelter / cages for birds, feeders / drinkers etc. for 20 birds. The assistance to the tune of Rs 4000 was quite adequate for supply of 45 birds per beneficiary. In other words, the provision of Rs 4000, per family towards cost of bird can take care of cost to the extent of Rs 88 as against Rs 30 considered by GOI. Incidentally, the provision of Rs 30 per bird considered by GOI appears to be rather inadequate considering rates fixed by the GOK with reference to cost of production vis-à-vis market price which is indicated in Table No. 5.

Table 5: Cost of Giriraja commercial chicks at different life stages (DoC to eight weeks)

Sl.no	Age group (weeks-days)	Price/bird (Rs)	Sl.no.	Age group (weeks-days)	Price/bird(Rs)
1	1 week- 1 to 6 days	15	5	5 weeks- 28 to 34 days	60
2	2 weeks- 7-13 days	25	6	6 weeks- 35 to 41 days	70
3	3 weeks- 14to 20 days	35	7	7 weeks- 42 to 48 days	80
4	4 weeks- 21 to 27 days	50	8	8 weeks- 49 to 55 days	90

NB: 1 The price of Rs 15 per chick mentioned at serial no. 1 above is inclusive of packing charges.

2 To take care of transit mortality during transport 3% chicks are supplied free of cost.

3 The commercial Giriraja chicks to be reared up to 6-8 weeks of age. In case of inevitable circumstances where the birds are required to be reared beyond this age, they could be sold @ Rs 70 per Kg live weight with prior permission from appropriate higher authority.

2.2.3 The average body weight of Giriraja parents stock at different life stages (age in weeks) has been considered/assumed as furnished in Table No.6:

Table 6: Average body weight of Giriraja parent Stock at different age groups

Age in weeks	2-5	6-10	11-15	16-20	21-35	Above 35
Weight (Kg)	0.50	1.00	1.50	2.00	2.50	2.75

NB: The spent hens/culled hens etc. are not be sold at a price below Rs 50 per Kg live weight.

2.2.4 The price of fertile egg as fixed for the period from 01.01.2015 to 31.12.2015 was Rs 6 per egg. The broken/soiled/damaged price of egg is fixed at 50 paise per egg (Re. 0.50). The price of unfertile Giriraja eggs is based on their respective grades. Such eggs are categorized into five grades and their price is fixed as under.

Table 7: Sale price of fertile and table eggs

Grade	1.Very big	2.Big	3.Medium	4.Small	5.Very small
Price (Rs/egg)	3.50	3.00	2.50	1.50	1.00

Source for Table Nos. 5, 6 &7: Communication issued by Director AH&VS to State Poultry Centers

2.3 Expected process under the scheme:

2.3.1 Scheme process:

Under the scheme evaluated, Giriraja chicks were expected to be produced in six poultry farms located at Hessarghatta (Bengaluru), Malavalli (Mandya), Gangavathi (Koppal), Kudige, Gundlupete and Bangarapete. The time taken to produce a chick was 21 days; for 18 days the egg were kept in an incubator followed by three days in a Hatcher. These chicks were then reared for 4 to 6 weeks in 23 Poultry Extension Centres (PEC) of the State. These hardy and fit Giriraja chicks were then ready and distributed free of cost to BPL rural households, the beneficiary of each was expected to be chosen in Gram Sabha following the procedure that was prescribed for selection of beneficiaries under the scheme. The total number of chicks planned to be given to a family was 45, to be given in three batches. In the first stage 20 raised chicks were to be given, while in the second 15 and in the last batch 10 chicks were to be given. The number of chicks given was determined by the cost of the chick and the total amount provided for beneficiary under the scheme, which at the time of inception of scheme was Rs. 4000. (No Government Resolution was available and could not be seen by the study team to strengthen the mention about the provision of Rs 4000 per beneficiary). The second and third batches were to be given after checking the progress at 16th and 32nd weeks. Along with the chicks, the beneficiary was to be provided a bio secure night shelter /cage, feeders /drinkers etc. costing Rs.750. The beneficiary was expected to rear these raised chicks and the eggs and meat were to be used by him/her for consumption and sale.

2.3.2 Benefits to be accrued from the scheme:

By consuming some of the eggs laid by the birds given to the households and also the meat of few birds (after they become old i.e. after 73 weeks of age) the nutritional status of the household was expected to improve, and through the selling of a part of the eggs and meat, the household is expected to benefit financially. These were the two objectives of the scheme. Some earnings were expected to be made from selling of poultry manure too.

2.3.3 Geographical scope of the scheme:

The distribution of Giriraja chicks to BPL beneficiaries was limited to the six districts of the State namely, Bengaluru Urban, Bengaluru Rural, Ramanagara, Shivamogga, Tumakuru and Mandya. It was proposed to extend this to all districts of the State. It was also proposed to charge the beneficiary a token amount for each bird provided to them.

2.3.4 Monitoring process under the scheme:

No formal codified monitoring system was prescribed under the scheme for monitoring. Evaluation revealed that Veterinary Officers/ Assistant Directors, DAH&VS have not kept any record of the condition, use, mortality, disease etc. of the birds supplied under this scheme.

2.4 Evaluation Scope and Purpose:

Since the chicks were given to beneficiaries in only six districts of the State, the evaluation study was confined to only six districts namely (a) Bengaluru Urban, (b) Bengaluru Rural, (c) Ramanagara, (d) Shivamogga, (e) Tumakuru, and, (f) Mandya.

The objective and purpose of the study was to find/evaluate:

- a. Whether the scheme has reached out to only to the BPL families in the six districts?
- b. Whether the families given the chicks have reared them with the interest and care expected in case of a bird/animal belonging to them?
- c. What was the performance of Giriraja bird? Did it conform to the production and reproduction standards claimed in the Table 5.1? If not, why were the deviations and how much away from the claimed figures they were?

- d. Whether the nutritional and financial status of the beneficiary and his/her family has improved because of the scheme?
- e. Whether it will be prudent and better to require the beneficiary to contribute a part of the cost of the bird?
- f. What changes are to be suggested for better implementation of the scheme?

2.5 Achievements made in implementation of the scheme:

The year wise number of beneficiaries covered in each district under this scheme and the number of chicks given to them is given as **Appendices 1A** and **1B**.

Chapter 3

Review of literature/Past Evaluation reports

Rural Backyard Poultry (RBP) which can alternatively be called as Rural Family Poultry (RFP) represent an appropriate system for supplying the fast growing human population with high quality protein and providing additional income to resource poor small farmers, especially women. Requiring low levels of inputs (i.e. housings, cages, feeds, vaccines, drugs, equipment and time/attention), FP contributes significantly to food security, poverty alleviation and the ecologically sound management of natural resources. RFP produce, being lower in quantum is almost consumed at the village level itself.

There is also evidence that, given pervasive market and institutional imperfections, mainly commercial producers have benefited from the growing markets for animal protein, and that the potential contribution of livestock sector growth to poverty reduction has remained largely untapped (1. *Blench et al., 2003; LID, 1999*). Growth in the sector has been primarily driven by large scale commercial farms whilst small farmers and the landless, who form the majority of the poultry producers, have largely been bypassed by this growth (2. *GOI, 2005*). However, the Government of India has recognized the potential of small scale poultry sector development for poverty reduction (3. *GOI, 2005; 2008*). Investing public resources in livestock and in poultry within livestock, for an inclusive growth of the agricultural sector, could be an effective way to contribute to poverty reduction. Keeping the importance of rural poultry in background, the Government of India formulated policies to support and augment rural poultry. This was planned and implemented with three tier structure. The first tier involves Central Government Institutions, Indian Council of Agricultural Research (ICAR) organizations, State Agricultural Universities (SAUs), Veterinary Universities, and private rural breeders for supplying the requisite parent stock of rural birds. The second tier involves State Institutions, State Poultry Farms, and District rearing centres which were assisted by a scheme called ‘Assistance to State Poultry Farms’ for strengthening infrastructure and to meet

operational expenditure. The third tier involves grass root institutions, NGOs and farmers to operationalize the scheme.

Basic concept of rural poultry revolves around production of coloured variety of chicken similar to desi or local variety with a higher performance output namely more body weight gain and more egg production under low input technology conditions. (4. *CPDO, Management Guide*)

Giriraja birds under backyard poultry farming system are being reared throughout the country in different geographical locations. Success story on ‘Empowerment of Rural Women through backyard Poultry by using Giriraja breed published by KVK, Solapur. (5. *Success story, KVK Solapur*) has outlined the economic traits/production aspects of Giriraja breed (Table 1) Vis-à-Vis results at Farmers’ field, (table 2) which are summarized in Table No.8.

Table 8: Production Results: Giriraja breed at Farmer’s field as reported by KVK, Solapur

Sl. no.	Particulars	Economic Traits	Field Results
1	Weight of chicks at day old (gm)	41-42	34-37
2	Age at sexual maturity (Days)	166	Not Available
3	Survivability at the age 8 weeks (%)	95-98	97
4	Egg production up to 500 days (no.)	120-150	110-130
5	Egg weight (gm)	50-55	Not Available

It was reported in the above success story that rearing Giriraja birds enabled the empowerment of rural women as she was able to gain some revenue and this aided her in playing the role of decision maker in her family.

In the field study undertaken to evaluate efficiency of production performance of Giriraja and Desi birds in 32 households with 20 birds each under backyard system of rearing in Thanjavur district of Tamil Nadu State, with respect to age at sexual maturity, average weight

at first egg, average live weight at 28th week and hen day egg production at 52 weeks of age, following observations were made (6. *Yogeshpriya Somu, 2015*).

- i The average live weight gain of Giriraja birds after 6 months was 2.127 kg which was higher than that of Desi birds (1.100kg).
- ii Age at sexual maturity was ranged between 155-157 days in Giriraja birds whereas the age at sexual maturity in Desi birds was 181-182.
- iii The mean weight at first egg was 45g in Giriraja whereas 38g in Desi birds.
- iv The egg production up to 52 weeks of age ranged from 202.56 to 206.12 in Giriraja and 91.78 to 93.61 in Desi birds.
- v Moreover, the average weight of chicks of Giriraja and Desi birds at day old age observed was 50.2g and 41.8g, respectively.

In a field experiment , backyard poultry farmers from Satara, Maharashtra, India were given a total of 180 Giriraja fowls to study the rearing of these fowls as opposed to that of local birds. Each of the 12 marginal farmers received 15 birds during 2005 to 2006. The production results are listed below. (7. *Patil S D, 2008*).

- i Average live weight of Giriraja and local fowls was 2115.83 and 1256.66 g, respectively.
- ii Average live weight after 6 months of Giriraja and local fowls was 2050-2250 and 1210-1310 g, respectively.
- iii The average live weight gain of Giriraja fowls after 6 months was higher than that of local fowls (2079.58 vs. 1219.50 g).
- iv Moreover, the average egg production of Giriraja fowls was higher than that of the local fowls (149.91 vs. 54.75 eggs per year).
- v The cost of rearing Giriraja fowls was the same as that of local birds.

KVK, Sikkim facilitated the small poultry farmers who were earlier engaged in rearing local birds to take up rearing of dual purpose improved breeds viz. Vanaraja and Gramapriya, which created a positive impact on improving the livelihood status of the farming community of Nandok village, East Sikkim district, Sikkim. The village is an adopted village under National Initiative on Climate Resilient Agriculture (NICRA) project (8. *Impact study, KVK, Gangtok*)

KVK, Lower Dibang Valley, Arunachal Pradesh distributed 10 fertile eggs of Vanaraja breed procured from Poultry Division – All India Coordinated Research Project (AICRP),

Veterinary College, Khanapara, Assam Agriculture University, Guwahati to poor rural women. Due to easy accessibility of eggs at doorstep, the rural women could rear the birds conveniently. Local nondescript birds were upgraded due to crossbreeding of improved breed. Feedback from farmers included faster growth of birds, more number of bigger sized eggs, sustenance under low input system, resistance to most of the diseases, etc. (9. 2010, Report by KVK, Lower Dibang Valley)

1. *Blench R., R. Chapman, T. Slaymaker* (2003) A Study of the Role of Livestock in Poverty Reduction, Strategy Papers (PRSPs). PPLPI Working Paper No.1, FAO, Rome.
2. GoI (2005) Mid Term Appraisal of the Tenth Five Year Plan (2002-2007). Planning Commission, Government of India.
3. GOI (2008) National Livestock Policy 2008. Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture. Government of India.
4. CPDO, Management Guide for Rural Poultry by Central Poultry Development Organization and Training Institute, Hessarghatta, Bangalore – 560088
5. Success story on ‘Empowerment of Rural Women through backyard Poultry by using Giriraja breed, Krishi Vigyan Kendra, Khed, Kegaon, North Solapur Taluk, Solapur- 413 255
6. *Yogeshpriya Somu* (2015), Comparative study of Giriraja and desi breed under backyard system of rearing in farmers’ field. My Research Journals, Vol.6 No.2
7. *Patil S. D., Patil H. D., Mote P.U, Jagtap J. B.*, A study on rearing of Giriraja birds, Agriculture Update 2008, Vo. 3., No. 1 / 2 pp 208-210.
8. Impact study – Backyard Poultry creates excellent impact on livelihood in East Sikkim, KrishiVigyan Kendra, ICAR Research Complex for NEH Region, Sikkim Centre, Ranipool, East Sikkim, Gangtok.
9. 2010, Backyard Poultry Farming of Vanaraja Breed: A less Capital Enterprise, Krishi Vigyan Kendra, Lower Dibang Valley, Arunachal Pradesh.

Chapter 4

Log frame / Theory of Change / Basis for Government intervention

4.1 Poultry farming in India has transformed into a techno-commercial industry from the status of backyard farming since three decades. Poultry production is achieved generally by commercial poultry operations; however a significant contribution comes from backyard poultry also. Backyard Poultry is a good occupation for the rural masses for economic sustainability and nutritional security.

4.2 Basic concept of backyard poultry revolves around production of coloured variety of chicken similar to desi or local variety with a higher performance outputs namely more body weight gain and more egg production under low input technology conditions.

4.3 Keeping the importance of backyard poultry in background, the Government of India formulated policies to support and augment backyard poultry which contributes nearly 30% of revenues in the poultry sector. This was planned and being implemented through central sector schemes with 3- tier structure. The first tier involves Central government institutions, ICAR organizations, State Agriculture Universities, Veterinary Universities and private rural bird breeders for supplying the requisite parent stock of rural birds. The second tier involves State Institutions, State Poultry Farms, and District rearing centers etc., which were duly assisted by a scheme called “Assistant to State Poultry Farms” for strengthening infrastructure and to meet operational expenditure. The third tier involves grass root institutions, NGOs and farmers to operationalize the scheme.

4.4 Under Rural Backyard Poultry Development Scheme GoI planned enriching small farmers and landless labour families through a more holistic and self-reliant approach, not only in terms of improvement of income and employment but also in terms of improving their nutritional status using poultry as a tool. The target group under the scheme covers BPL families for whom poultry birds and some additional inputs viz. bio shelter, feeders, waterers were envisaged, so that the beneficiaries are able to rear the poultry birds and supplement their livelihood with poultry production as also improve the nutritional status of the family. The scheme is implemented by the Department of Animal Husbandry and Veterinary Services (DAH&VS) of the Government of Karnataka (GOK) since 2011 in six districts (Bengaluru Rural, Bengaluru Urban, Ramanagara, Mandya, Tumakuru and Shivamogga) of the State.

4.5 DAH&VS, GoKbeing at helm of affairs as implementing agency, all the interventions planned by GoI appear to be most realistic as also feasible and theory of change can be used very well besides other approaches. The efforts of DAH&VS backed by project budget approved by GoI will influence change and the program will lead to results. This is the general purpose of both log frame and theory of change.

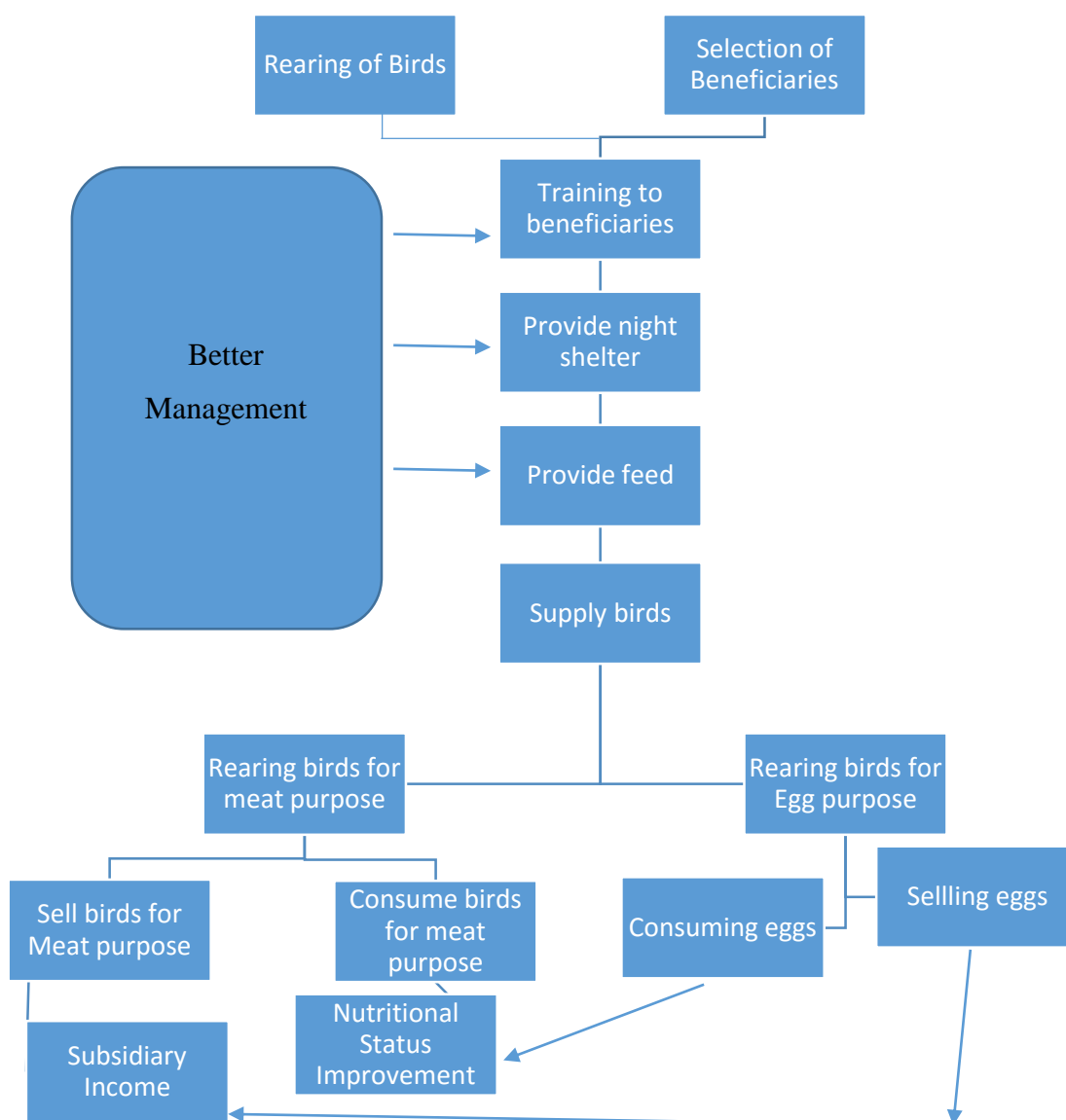
4.6 The tasks vis-à-vis activities to be performed to produce the desired output / results are furnished in Table No: 09

Table 9: Broad Logical framework under Backyard Poultry Development Scheme

S No	Inputs	Tasks- activities	Output
1	Specified coverage	Selection with the help of GramaSabha	BPL beneficiaries selected.
2	Geographical coverage	Absence of organized sector.	Coverage of beneficiaries from unorganized sector
3	Extension measures	Awareness creation	Good management of birds
4	DAH&VS infrastructure	Four week old birds	Giriraja birds distributed
5	Beneficiary involvement	Token amount charged	Ownership of the birds
6	Good quality birds	Nutritional status	Family health
7	Feed supply	Nutrition of birds	Good weight gain / no. of eggs
8	Birds supplied	Sell to neighbors	Subsidiary income
9	Monitoring of progress	Supply of birds in batches	Asset creation
10	Input supply	Night shelter	Asset protection

4.7 The purpose/goal of programme is to enable generation of subsidiary income and better nutrition to the family. To obtain these two outcomes specific activities like awareness / training programmes, inputs/exposure visits on management of birds may to bring awareness about better management of birds as also this will sensitize the beneficiaries to take care of birds which will result in asset creation leading to better subsidiary income. The project has made required provision for carrying out the activities needed for achieving the goal. A broad structure of logical frame work describing sequence of interventions that lead to a particular desired outcome is represented below with the help of flow chart by starting at the top and using information from the objectives.

Logical Framework



Chapter 5

Progress Review

5.1 As on 31st March 2015, an aggregate expenditure of Rs. 104.25 lakh has been made by DAH&VS against the total cost of Rs.231.50 lakh, registering financial progress of 45.03%.

5.2 The programme has 5 components with a total cost of Rs355.00 lakhs. Out of these 5 components, the progress under 2 components (Fixed cost to beneficiaries @ Rs. 750 for shelter and other inputs and Birds for beneficiaries @ Rs. 30 per bird And 45 birds per beneficiary) is discussed in the report. In case of 3 other components, the progress is not discussed as the same were not implemented by DAH&VS as part of the scheme. The remaining 3 components basically relate to setting up of Mother units for backyard poultry. The same are excluded for the limited purpose of discussion in the report.

5.3 As per para 6 of GOI letter number 43-8/2011-LDT (P) dated 04-07-2011 Low Input Technology (LIT) Breeding Stock maintained and reared by State Poultry Farms (SPFs) is to be distributed to BPL beneficiaries. As per Annexure A of the said letter an amount of Rs 240.50 lakh for 10500 BPL beneficiaries was recommended for release which comprised Rs 78.75 lakh towards fixed costs for cages/night shelter and other inputs like feeders/drinkers etc. and Rs 141.75 lakh for birds (4,72,500 No's). The unit rate for per beneficiary worked out to Rs 750 towards fixed costs for 20 birds and Rs 1350 for 45 birds (@ Rs 30 per bird). As per Annexure IIB of GOI letter No. 43-23/2009-LDT (P) dated 26-04-2011, the 45 reared birds (4 weeks) were to be given to BPL families in installments after checking progress at 16th and 32nd week. The batch size being 20, 15 and 10 as indicated/mentioned vide evaluation question No.2 of the Terms of Reference (TOR).

5.4 During the three year implementation period, GOK covered 8731 beneficiaries and distributed 1, 79,012 birds (around 20+ birds per beneficiary). The target and achievement for the two components is indicated in the table given below.

(Amount Rs. Lakh)

Table 10 the target and achievement

S. No.	Items	Target		Achievement	
		Physical units	Financial	Physical units	Financial
1	Fixed cost to beneficiaries @ Rs. 750 for shelter and other inputs	16200	121.5	NA	50.54
2	Birds for beneficiaries @ Rs. 30 per bird and 45 birds per beneficiary	729000	218.7	179012	53.7
	Total cost		340.2		104.25

The aggregate existing chick production capacity of state Government is around 6 lakh plus chicks per annum from the existing parent stock of 5,500 parents. Against these, a total of 1.79 lakh chicks were utilized under the scheme during the three year implementation period. As such adequate rearing facilities may perhaps be the main reason for low progress rather than shortage. Hence due to shortage of raised birds, all the beneficiaries didn't receive the required number of birds.

5.5 It will be seen from the above that GOI expected to cover 10,500 beneficiaries against which 8731 beneficiaries have been covered under the scheme which means 83% target is achieved on terms of coverage of beneficiaries. However, the total birds required to be distributed worked out to 4, 72,500 @ 45 birds per beneficiaries. Against this 1, 79, 012 birds were supplied achieving 38% target in terms of supply of birds.

5.6 There is lot of demand for improved fowls and there is no reason for short fall in targets provided physical and financial provisions are made in time and the scheme implementation procedure is streamlined along with regular follow-up from State level.

5.7 The program was implemented over a period of 3 years (2012-13 to 2014-15). During the first year of implementation (2012-13), the scheme was implemented in two districts viz, Bengaluru Urban (all four Taluks) and Ramanagara Districts (One Taluk i.e. Ramanagara Taluk).

5.8 During the subsequent two years (2013-14 and 2014-15) the program was scaled up and the scheme was implemented in additional four districts viz., Bengaluru Rural, Mandya, Tumakuru and Shivamogga.

5.9 The targets for two districts namely Bengaluru Rural and Bengaluru Urban were not available for all the implementation years i.e. 3 years and two years, respectively. As such comparison of achievements with the targets could not be attempted for the above two districts.

5.10 The overall achievement for the three year implementation period was 55% in case of coverage of beneficiaries while with reference to number of birds, the achievements was 35%. In Tumakuru District, achievement was cent percent both in terms of number of beneficiaries and number of birds during the year 2013-14. Although during the year 2014-15, the achievement in Tumakuru District was 100% in terms of number of beneficiaries covered, it was 33% with reference to number of birds.

Chapter 6

Problem Statement

6.1 The planned interventions have since been implemented rather successfully to the extent the funds were actually made available / released.

The project is expected to resolve the wider problem of less availability of quality nutrition to the BPL families to some extent. Judging by the qualitative way, the goal in this regard appears to be not reached in its true sense.

Although the bird chosen by the Government was right, the birds didn't perform up to the standards at the field level due to multifarious reasons at various levels/stages. The body weight at eight weeks, adult males (24 weeks) and adult females (24 weeks) were 0.95 kg, 3.53 kg and 3.16 kg, respectively. As per the leaflet published by UAS, Hebbal, Bengaluru, the body weight (lower range) at the respective life stages are 1.60 kg, 4.50 kg and 3.50 kg. The average weights observed in case of the sample beneficiaries were lower by 41%, 22% and 10%, respectively against the said life stages.

The birds were culled before the end of/ completion of their productive life span. The overall average age at which hens were culled was found to be 41 weeks. This is far lower than the generally accepted economic life of 73 weeks.

The overall mortality was 49.52% which is on a very high side, of which 22.91% was due predation. The loss of birds due to predators like stray dogs and cats, wild animals (Mongoose, in vernacular called Keera) ranged from 12-39%. The beneficiaries could have prevented the same with little extra care/attention and proper protection (night shelter). The beneficiaries didn't have amenities like adequate and proper night shelter for the birds. Night shelter was provided to only 89 beneficiaries (36%) out of the 247 beneficiaries. This is one of the major reasons for death due to predation. Availability/supply of night shelter should precede receipt of birds at the farmers' level to ensure protection of birds from predators.

The average mortality due to disease was 26.61% which also includes deaths on account of stress.

The only silver line is that in four Taluks viz., Bengaluru South (4%) Ramanagara (8%), Hoskote (8%), and Devanahalli (9%) the average mortality due to disease & stress incidence was less than 9 %, which is close to the figures quoted by CPDO & TI for Rural layers in their publication (Management Guide for Rural Poultry).

6.2 As per the scheme implemented by GOK, birds raised up to four weeks of age were to be supplied to beneficiaries. At the age of four weeks perhaps the birds might not have become sufficiently hardy and fit/ready for distribution. It would have been advisable to supply the birds after completion of the minimum brooding period of say six weeks.

6.3 There was no sensitive support mechanism, guidance available to beneficiaries after supply of birds. The birds were not transported at beneficiaries door step in proper manner. The birds were supplied to the beneficiaries at four weeks of age due to which the vaccination against important disease like Fowl pox (at 6th week), was missed.

6.4 In the absence of proper skill up gradation training, guidelines, recommendations, the farmers didn't take up preventive medications (anti stress drugs like electrolytes, antibiotics etc.) for the birds on their arrival at their place.

6.5 The nutritional and financial status of the family improved as a result of supply of income generating assets in the form of Poultry birds. However, there was no appreciable sustainability of the income as none of the beneficiaries sourced new chicks from the relevant sources for their future use.

6.6 The details of major deviations, Non conformities, digression of programme, etc. are furnished in Table No: 11

Table 11: Details of major deviations, Non conformities, digression of programme

Sl.no	Programme guidelines and Set up required	Deviations/non conformities	Remarks/ Reference
1	Selection of beneficiaries through gram Sabha	Done only in 4 taluks out of 9 taluks.	Dates of Gram Sabha were not available.
2.	Beneficiaries necessarily from BPL families. The AH department expected to verify BPL card, obtained copies and note the card numbers.	Out of the total sample of beneficiaries (247), 3 beneficiaries (<1%), 2 from Bengaluru north Taluk and 1 from Shivamogga Taluk were found to be not belonging to BPL categories.	Shanthamma Krishna Murthy, Prashanth (Bengaluru North) and Ms. Rathamma (Shivamogga).
3.	Cluster areas/pockets were to be selected where there only the unorganized sector is present i.e. commercial, industrial or even SME is not present. It would have been prudent on the part of state Government to select less developed district for scheme implementation where unorganized sector is present i.e. not even SME is present.	One of the districts viz, Bengaluru ® has the highest contribution of 15.28% of total poultry population in the state. Besides, Bengaluru® district the other five districts viz, Bengaluru (U), Ramanagara, Tumakuru and Mandya and Shivamogga appear to be better developed commercially/industrially as compared to some other districts.	Less developed districts like could have been considered.

Sl.no	Programme guidelines and Set up required	Deviations/non conformities	Remarks/ Reference
4.	State Government should have organized basic training for farmers as also AH and VS staff	Overall no such specific effort was made by the state government.	Most of the farmers as well as AH department staff wanted training.
5.	Subsidy was recommended for release for 35 mother units (at 300 beneficiaries per mother unit). Each mother unit is expected to supply 13,500 birds i.e. 9 cycles with 1500 birds per cycle.	There appeared to be not much progress in regard to setting up mother units.	As per GOI letter No. 438/2011LDI(P) dated 04.07.2011
6(a)	Total 45 birds to be given in three batches. The second and third installments were to be given after checking progress at 16 th and 32 nd week. The batch size for 1 st , 2 nd and 3 rd batch was fixed at 20, 15 and 10 respectively.	In the entire sample of beneficiaries only 36 were received 45 birds. In Maddur Taluk out of 34, 26 beneficiaries were given 45 birds in 2 batches only.	In Tiptur Taluk out of 10 beneficiaries 8 were given 45 birds while in Ramanagara 10 were given 45 birds.
b	First batch of 20 birds to be made available	The first batch of 20 or more birds was given to 30 families (12%) out of 247 families.	Four families from Tiptur and 26 from Maddur.
c.	The 2 nd and 3 rd installment was to be given after checking progress at 16 th and 32 nd week.	This was not followed. The progress of earlier batches was not checked.	Annexure II (B) of GoI letter Ref. No. 43-23/2009-LDT(P) dated 26.04.2011
d.	The batch size of 1 st , 2 nd and 3 rd batch was fixed at 20, 15 and 10 respectively	This stipulation was followed only in case of two beneficiaries from Tiptur Taluk of Tumakuru district	Item No. 2 of ToR of the Study.
e.	A provision of Rs 750 per family was available/made for cages/shelter, feeders/Wateres etc. for 20 birds.	This provision was utilized only in Mandya, Tumakuru (and Ramanagara districts.	The provision was just sufficient for one drinker and one feeder.
f.	Supply of other inputs to precede supply of birds. Logically to be supplied along with I batch.	This was observed in case of 13(5%) families from 2 Taluks (7 & 6).	Ramanagara and Shivamogga.
g.	Birds to be supplied at beneficiaries' doorstep. Proper transport arrangement.	Birds not supplied at farmers' doorstep in Maddur Taluk.	High transport mortality due to stress.
h.	Birds to be sourced from six Govt. farms.	In Madhugiri birds were sourced privately.	Birds from private party.

Chapter 7

Scope, Objectives and Issues for evaluation

7.1 Scope of the study is in project area in 6 district of and 31 taluks of Karnataka. These are Bengaluru Urban, Bengaluru Rural, Ramanagara, Mandya, Shivamogga and Tumakuru. The taluk wise details wherein the study was undertaken is given in table no. 12.

Table 12 The taluk wise details

Sl. No.	Name of District	Name of Taluk		Sl. No.	Name of District	Name of Taluk			
1	Bengaluru U	i	Anekal	5	Shivamogga	i	Shivamogga		
		ii	Bengaluru N			ii	Shikaripur		
		iii	Bengaluru S			iii	Soraba		
		iv	Bengaluru E			iv	Hosanagara		
2	Bengaluru R	i	Devanahalli			vi	Sagar	vii	Bhadravati
		ii	Doddabalapura			viii	Tirthahalli		
		iii	Nelamangala			6	Tumakuru	i	Sira
		iv	Hoskote					ii	Tiptur
3	Ramanagara	i	Ramanagara	iii	Tumakuru				
		ii	Channapatna	iv	Kortagere				
		iii	Magadi	vi	Madhugiri				
		iv	Kanakapura	Six districts and 31 Taluks					
4	Mandya	i	Mandya						
		ii	Maddur						
		iii	Malavalli						
		iv	Srirangapatna						
		vi	K R Pet						
		vii	Pandavpura						
		viii	Nagamangala						

7.2. The three components pertaining to setting up of Mother units for backyard poultry have been excluded for the limited purpose of discussion in the report as the same were not implemented by DAH&VS as part of the scheme. Out of the total 5 components, the progress under 2 components (Fixed cost to beneficiaries @ Rs. 750 for shelter and other inputs and Birds for beneficiaries @ Rs. 30 per bird And 45 birds per beneficiary) is discussed in the report. The programme has 5 components with a total cost of Rs 355.00 lakhs.

7.3. The main objectives and purposes of the study are to find/evaluate:

7.3.1 Whether the scheme is reaching out to the BPL families?

7.3.2 What is the performance of the Giriraja bird?

7.3.3 Whether the nutritional and financial status of beneficiary improved?

7.3.4. Whether it will be prudent to require the beneficiary to contribute towards cost of the bird?

7.3.5. What changes are to be suggested for better implementation of the scheme?

7.4. The field study was conducted in the month of December 2015 (from 02.12.2015 to 30.12.2015) covering 247 sampled beneficiaries from 10 Taluks of the six Districts of the State where the scheme is being implemented. The target groups intended are BPL households identified by the Gram Sabha. Under the scheme evaluated, Giriraja chicks were expected to be produced in six poultry farms located at Hessarghatta (Bengaluru), Malavalli (Mandya), Gangavathi (Koppal), Kudige, Gundlupete and Bangarapete. The time taken to produce a chick was 21 days; for 18 days the egg were kept in an incubator followed by three days in a Hatcher. These chicks were then reared for 4 to 6 weeks in 23 Poultry Extension Centres (PEC) of the State. These hardy and fit Giriraja chicks were then ready and distributed free of cost to BPL rural households, the beneficiary of each was expected to be chosen in Gram Sabha following the procedure that was prescribed for selection of beneficiaries under the scheme. The total number of chicks planned to be given to a family was 45, to be given in three batches. In the first stage 20 raised chicks were to be given, while in the second 15 and in the last batch 10 chicks were to be given. The number of chicks given was determined by the cost of the chick and the total amount provided for beneficiary under the scheme, which at the time of inception of scheme was Rs. 4000. (No Government Resolution was available and could not be seen by the study team to strengthen the mention about the provision of Rs 4000 per beneficiary). The second and third batches were to be given after checking the progress at 16th and 32nd weeks. Along with the chicks, the beneficiary was to be provided a bio secure night shelter /cage, feeders /drinkers etc. costing Rs.750. The beneficiary was expected to rear these raised chicks and the eggs and meat were to be used by him/her for consumption and sale.

7.5. The issues for evaluation / evaluation questions are listed in Annexure – B

Chapter 8

Evaluation Design and Selection of Sample

8.1. Sampling

Since the most productive life of the bird is 73 weeks, it was expected that the bird would be disposed after this period by the beneficiary. Thus, birds given in the financial year 2011-12 and 2012-13 were not expected to be found (but their progeny could); few birds given in 2013-14 were expected to be seen during the field visits in December 2015, but birds given in 2014-15 were expected to be seen during the field visits. Thus sampling was made in such a way that the more recent the year in which the chicks were given, the more was the sampling intensity for the population of that year. Since the population was expected to be more or less homogenous (BPL families, same breed and number of birds given) sampling intensity was kept less and limited to 2% of the population of 8731 beneficiaries of the entire period. Samples were drawn from only the Taluk of a district that had the maximum population size in 2014-15 and least in 2013-14 and 2012-13. The year wise details of total beneficiaries covered and the sample size has been indicated at para seven, section 3 on TOR of the RFP document. Accordingly the sample has been drawn, in consultation with the department of Animal Husbandry and Veterinary Services. The sample size works out to 2.83% of the total population. The details are furnished in Table No.13.

Table 13: Details of year wise total number of beneficiaries vis-à-vis sampled drawn.

Sl. No	Name of District	Name of Taluk	Year							
			2011-12		2012-2013		2013-14		2014-15	
			Total Families	Sample	Total Families	Sample	Total Families	Sample	Total Families	Sample
1	Bengaluru U	Anekal	0	0	50	10*	0	0	243	0
		Bengaluru N	0	0	436	0	0	0	840	84
		Bengaluru S	0	0	880	0	138	10	560	0
		Bengaluru E	0	0	257	0	0	0	0	0
SUB TOTAL			0	0	1623	10	138	10	1643	84
2	Bengaluru R	Devanahalli	0	0	0	0	279	0	340	34
		Doddaballapura	0	0	0	0	348	0	0	0

Sl. No	Name of District	Name of Taluk	Year							
			2011-12		2012-2013		2013-14		2014-15	
			Total Families	Sample	Total Families	Sample	Total Families	Sample	Total Families	Sample
		Nelamangala	0	0	0	0	245	0	195	0
		Hoskote	0	0	0		202	10	200	0
SUBTOTAL			0	0	0	0	1074	10	735	34
3	Ramanagara	Ramanagara	0	0	50	0	130	7	100	10
		Channapatna	0	0	30	0	130	0	0	0
		Magadi	0	0	30	0	170	0	0	0
		Kanakapura	0	0	10	0	170	0	0	0
SUB TOTAL			0	0	120	0	600	7	100	10
4	Mandya	Mandya	0	0	0	0	11	0	149	0
		Maddur	0	0	0	0	11	11	239	24
		Malavalli	0	0	0	0	11	0	29	0
		Srirangapatna	0	0	0	0	45	0	211	0
		K R Pet	0	0	0	0	58	0	88	0
		Pandavpura	0	0	0	0	11	0	53	0
		Nagamangala	0	0	0	0	64	0	193	0
SUB TOTAL			0	0	0	0	211	11	962	24
5	Shivamogga	Shivamogga	0	0	0	0	132	13	Beneficiaries covered during 2013-14 have been supplied the next batch of chicks in the year 2014-15	
		Shikaripur	0	0	0	0	128	0		
		Soraba	0	0	0	0	128	0		
		Hosanagara	0	0	0	0	128	0		
		Sagar	0	0	0	0	128	0		
		Bhadravati	0	0	0	0	128	0		
		Tirthahalli	0	0	0	0	128	0		
SUB TOTAL			0	0	0	0	900	13	0	0
6	Tumakuru	Sira	0	0	0	0	216	0	0	0
		Tiptur	0	0	0	0	100	10	0	0
		Tumakuru	0	0	0	0	132	0	0	0
		Kortagere	0	0	0	0	0	0	57	0
		Madhugiri	0	0	0	0	0	0	120	20
SUB TOTAL			0	0	0	0	448	10	177	20
TOTAL			0	0	1743	10	3371	61	3617	172

* All in just one village.

8.2 Sample size as per ToR vis-à-vis actually covered

As per the Terms of Reference and sample design mentioned in the inception report, a sample size of 243 beneficiaries was approved by the Technical Committee of KEA for the purpose of the study. As against this 247 beneficiaries were covered by the study team. The position of sample size for the respective financial year as approved by KEA and actual sample covered during the study is indicated in the Table No.14.

Table 14: Sample size as per TOR and Actual Coverage

Sl.no.	Taluks	2012-13		2013-14		2014-15		Total	
		ToR	Actual	ToR	Actual	ToR	Actual	ToR	Actual
1	Bengaluru Urban								
	Anekal	10	11	0	0	0	0	10	11
	Bengaluru (N)	0	0	0	0	84	86	84	86
	Bengaluru (S)	0	0	10	11	0	0	10	11
	Sub total	10	11	10	11	84	86	104	108
2	Bengaluru Rural								
	Devanahalli	0	0	0	0	34	34	34	34
	Hoskote	0	0	10	10	0	0	10	10
	Sub total	0	0	10	10	34	34	44	44
3	Ramanagara								
	Ramanagara	0	0	7	7	10	10	17	17
4	Mandya								
	Maddur	0	0	11	11	24	24	35	35
5	Shivamogga								
	Shivamogga	0	0	13	13	0	0	13	13
6	Tumakuru								
	Tiptur	0	0	10	10	0	0	10	10
	Madhugiri	0	0	0	0	20	20	20	20
	Sub total	0	0	10	10	20	20	30	30
	Grand Total	10	11	61	63	172	174	243	247

Chapter 9

Evaluation Methodology

9.1 Evaluation methodology

9.1.1 The evaluation questions are listed as 1-14 vide Terms of Reference (TOR) which is given as **Annexure A**.

9.1.2 Evaluation methodology involved personal interviews of the beneficiaries, for answering questions at 4-12 of the ToR governing the study. In case of questions at serial number 11 and 12, department officials too were interviewed. (The response for question number 6 was intended to result in perceptive outcome since no base line figures of nutrition and financial status were available) in case of answering questions at 1-4 and 9, inspection and computation was the method used.

9.1.3. The number of beneficiaries interviewed, nieghbours of the beneficiaries and other Rural Backyard Poultry farmers were 247, 66 and 28, respectively. The details of Taluk wise number of beneficiaries interviewed are indicated in Table No.10. While details of village wise number of beneficiaries, nieghbours and other Rural Backyard Poultry farmers are indicated in Annexure D.

9.1.4 Besides the beneficiaries, nieghbours and other Rural Backyard Poultry farmers, discussions were held with officials from DAH&VS at various levels such as State Directorate (Deputy Director), district level (Deputy Directors), Taluk level (Assistant Directors), Veterinary Dispensaries (Veterinary Doctors). The list of persons with whom the evaluation team had interaction during the course of the study is given in Annexure C.

9.2.1 The Technical Committee of KEA in its 16th meeting held on Jan 24, 2015 approved the Terms of Reference (TOR) for the evaluation of socio-economic development of daring women under phase VIII of STEP.

- 9.2.2.** KEA, then finalized NABCONS as an evaluation agency/ Consultant Organization (CO).
- 9.2.3.** Accordingly, NABCONS prepared an inception report which was submitted to KEA.
- 9.2.4.** A presentation on inception report/ work plan was made to technical committee of KEA in its 23rd meeting held on 24th Nov, 2015.
- 9.2.5.** The presentation covered among others, approach to each evaluation question of TOR with reference to different sets of questionnaires / formats (scheme beneficiaries, neighbor of the scheme beneficiary, other rural backyard poultry farmer and Animal Husbandry department officials, etc.) included in the inception report.
- 9.2.6.** As a prelude to the Study, a preliminary discussions were also held by NABCONS team with the Deputy Director (Poultry), DAH&VS. The study tools were pre-tested on at field level.
- 9.2.7.** Based on the pretesting exercise, the study tools (different questionnaires/ formats) in question were modified/ revised to make them more user as well as statistic friendly.
- 9.2.8.** These questionnaires were used during the field study.
- 9.2.9.** The evaluation methodology for collection of primary and secondary data is as under.

a. Primary Data

The study covered intensive sample survey by the members of evaluation team through tools developed for capturing the required information. For collection of primary data six sets of semi-structured questionnaires (Annexure B) were used as study tools for different sample types i.e. scheme beneficiaries, neighbor of the scheme beneficiary, other rural backyard poultry farmer and Animal Husbandry department officials. The questionnaires covered all the relevant aspects of Terms of Reference of the Study (Annexure –A). The Pro forma questionnaires are enclosed as Annexure B.

b. Secondary Data

Secondary data regarding the scheme implementation were collected from Head Office of DAH&VS and from office of District Deputy Directors of the districts where scheme was implemented and also from Veterinary officers of the block/village where the birds were distributed. (Structured questionnaire for DAH&VS was also used).

9.2.10. The sample was selected as indicated in the RFP document & approval sought from KEA for the inception report. The summary of the sample is furnished in Table - 15.

Table 15: District wise summary of sample selected for study

Sl. No.	Taluks	2012-13	2013-14	2014-15	Total
1	Bengaluru Urban				
	Anekal	11	0	0	11
	Bengaluru (N)	0	0	86	86
	Bengaluru (S)	0	11	0	11
	Sub total	11	11	86	108
2	Bengaluru Rural				
	Devanahalli	0	0	34	34
	Hoskote	0	10	0	10
	Sub total	0	10	34	44
3	Ramanagara				
	Ramanagara	0	7	10	17
4	Mandya				
	Maddur	0	11	24	35
5	Shivamogga				
	Shivamogga	0	13	0	13
6	Tumakuru				
	Tiptur	0	10	0	10
	Madhugiri	0	0	20	20
	Sub total	0	10	20	30
	Grand Total	11	62	174	247

Chapter 10

Data Collection and Analysis

10.1 For the purpose of the study, the relevant questionnaires / interview schedules were developed for different sample types i.e. scheme beneficiaries, neighbor of the scheme beneficiary, other rural backyard poultry farmer and Animal Husbandry department officials. The quantitative primary data collected from the field as also secondary data collected from relevant sources (DAH&VS) were compiled and digitalized for the purpose of obtaining qualitative data with reference to the sample type.

10.2 The data collected was planned as per the KEA requirement and as indicated in the inception report which was approved by KEA in its meeting held on 24.11.2015 Over & above the plan coverage, four extra sample beneficiaries were covered in Bengaluru (U) leading to extra sample of 4 beneficiaries. The details of the planned sample size and actual coverage are furnished in Table no. 16

Table 16: District-wise sample size (WDCS, FGD, TGM etc) planned and actually covered.

Sl.no.	Taluks	2012-13		2013-14		2014-15		Total	
		ToR	Actual	ToR	Actual	ToR	Actual	ToR	Actual
1	Bengaluru Urban								
	Anekal	10	11	0	0	0	0	10	11
	Bengaluru (N)	0	0	0	0	84	86	84	86
	Bengaluru (S)	0	0	10	11	0	0	10	11
	Sub total	10	11	10	11	84	86	104	108
2	Bengaluru Rural								
	Devanahalli	0	0	0	0	34	34	34	34
	Hoskote	0	0	10	10	0	0	10	10
	Sub total	0	0	10	10	34	34	44	44
3	Ramanagara								
	Ramanagara	0	0	7	7	10	10	17	17
4	Mandya								
	Maddur	0	0	11	11	24	24	35	35
5	Shivamogga								
	Shivamogga	0	0	13	13	0	0	13	13

Sl.no.	Taluks	2012-13	2013-14	2014-15	Total				
6	Tumakuru								
	Tiptur	0	0	10	10	0	0	10	10
	Madhugiri	0	0	0	0	20	20	20	20
	Sub total	0	0	10	10	20	20	30	30
	Grand Total	10	11	61	63	172	174	243	247

(P – Planned as per ToR; A – Actually covered during the field visits)

10.3 Out of the various sample types, the important sample has been the scheme beneficiaries followed by control group respondents from whom primary data were collected. During beneficiary interview, the information sought was of primary nature (a suitable schedule was also prepared with a view to capture uniform information for easy compilation and analysis). During the interview, the scheme beneficiaries indicated in general that the backyard poultry scheme is beneficial to them as it has improved their livelihood and also provided nutritional benefits for the family. In case of DAH&VS both at district level and at State level, secondary data were collected.

10.4 During the field visit to the villages where backyard poultry units were distributed, interview with the individual beneficiary was held by visiting the residences of the beneficiaries of the backyard poultry scheme. There after interviews with control group respondents were held. During the visit to the District Deputy Director, DAH&VS office, discussions were held with the District Deputy Director, DAH&VS. Wherever possible depending on the availability of District Deputy Director, DAH&VS the discussions were held on the first day of the visit to the district head quarter followed by wrap up discussions on the last day of the visit.

10.5 The data collected with the help of structured questionnaires were compiled and digitalized using Excel spread sheets. While presenting the results in the respective chapters, the outlier responses beyond data cleaning process were not considered for reporting. Depending on the appropriateness and feasibility, quantitative data were put to analytical techniques / statistical tools like averages, percentages etc and summarized for qualitative presentation. Due care is taken to ensure that the data collected, compiled and presented can be generalized to the large population in question.

The major areas covered under various heads are listed below.

- 1) Availability of the scheme to the BPL beneficiaries (Source : individual beneficiary and BPL card)
- 2) Sense of belonging, interest and care shown by the families who were given the chicks. (Source : individual beneficiary)
- 3) Performance of Giriraja bird and its conformation to the production and reproduction standards claimed by the University of Agricultural Sciences, Bangalore. Deviations, if any, from the claimed production and reproduction standards. (Source : individual beneficiary)
- 4) Improvement in the nutritional and financial status of the beneficiary and his/her family because of the scheme(Source : individual beneficiary)
- 5) Readiness and propriety of taking the contribution from the beneficiary. (Source : individual beneficiary and DAH&VS)
- 6) Changes suggested for better implementation of the scheme(Source : individual beneficiary and DAH&VS)

Based on the responses received from the scheme beneficiaries and the radiator effect on the non-scheme rearers of backyard poultry as well as control group, the performance of the scheme was analyzed.

The perception of beneficiaries about quality of Giriraja fowl give an in-depth information about the production and reproduction standards and the actual results observed at the field level.

The analysis of the scheme also helped to arrive at the conclusion that although the benefits of the scheme have not reached the beneficiaries in its entirety due to the implementation issues, the scheme is still relevant in terms of providing nutritional and financial stability to the rural poor. The Government should scale up the programme with improved implementation guidelines.

Chapter 11

Findings & Discussions

11.1 election of beneficiaries

11.1.1 The beneficiaries under the scheme were to be from families belonging to BPL category only. As such cent percent of the beneficiaries whose names are listed as beneficiaries by the Gram Sabha and having a valid BPL card were to be selected.

11.1.2 Out of the 247 beneficiaries, three beneficiaries were found to be not belonging to BPL families. These are, Santhamma Krishna Murthy and Prashanth from Doddajala village (Doddajala Gram Panchayat from Bengaluru North) and Rathnamma from Shivamogga. The percentage erroneous selection of non BPL families works out to little over 1% of the total sampled beneficiaries.

11.1.3 The details of these three beneficiaries from non BPL category are furnished in Table No. 17.

Table 17: Details of non BPL families covered under the scheme

Sl.no.	Particulars	Details of APL beneficiaries covered under the scheme		
		Shanthamma	Prasanth	Rathnamma
1.	Address	w/oKrishna Murthy, Doddajala Village, Bengaluru North Taluk (Bengaluru Urban district)	Doddajala Village, Bengaluru North Taluk (Bengaluru Urban district)	c/o Manjunath, Kambagamanna beedhi, Mattur Gram Panchayat, Shivamogga Taluk and district
2.	Mobile No.	9141050693	8123034779	9448719865
3.	Means of livelihood	Agriculture (Marginal farmer)	Agriculture (Small farmer having 2 acres of land holding)	Agriculture (5-6 acres of land including Bagar Hukum land)
4.	APL card number	APL/BGNR00285487	No card issued /available	SHI150105538
5.	Remarks	Holds APL card	Applied for APL card	Holds APL card

11.2 Steps followed in selection of families and distribution of inputs

11.2.1 The beneficiary families were required to be identified through Gram Sabha.

11.2.2 Out of the 247 beneficiaries, 246 beneficiaries responded to the question about awareness of the scheme. Thus, almost all beneficiaries with only an exception showed awareness about the scheme. As regards the question about source of knowledge, out of the 246 beneficiaries responded to the question, Extension Agencies was indicated as the source of knowledge by 192 beneficiaries (78%). Out of these, 192 beneficiaries, some beneficiaries also indicated that besides Extension Agencies, they received information from Gram Panchayat (72), Print Media (12), and elected representative (1). The second highest source of information was Gram Panchayat in case of 49 beneficiaries and one beneficiary indicated Village Meeting and Gram Panchayat as source of knowledge. In case of four beneficiaries the exclusive source of knowledge was village meeting while one beneficiary indicated Word of Mouth as only source of information. The responses can be summarized as below:

- a Extension agencies - 192 (of which 72 GP, Print media 12 and elected representative 1)
- b Gram Panchayat - 49
- c Village meetings - 4
- d Village meeting and Gram Panchayat - 1
- e Word of mouth – 1

As regards third party intervention for inclusion under the scheme only one beneficiary from Devanahalli indicated that she had used the good offices of Zilla Panchayat member for inclusion under the scheme. Similarly one beneficiary from Shivamogga indicated that she had used good offices of the Panchayat President. Both these beneficiaries, who used influence for inclusion in the scheme, indicated that they did not incur any cost for inclusion in the scheme. As regards cost incurred for inclusion in the scheme, only two beneficiaries from Shivamogga indicated that they had incurred some costs for inclusion in the scheme. However they refused to divulge any further details whatsoever in this regard.

11.2.3 The response on awareness about selection procedure was received from 229 beneficiaries out of the total sample of 247 beneficiaries. Out of these, 20 beneficiaries indicated

Gram Sabha as the selection procedure, while 76 indicated Gram Sabha and BPL card as the selection procedure. All the remaining beneficiaries indicated BPL card as selection procedure. Thus all the beneficiaries those who responded were aware of the selection procedure i.e. Gram Sabha and/or BPL card. Incidentally, all the 20 beneficiaries from Madhugiri Taluk and one from Bengaluru South indicated that besides BPL card, an application to DAH&VS is the selection procedure.

11.2.4 Out of the 10 Taluks covered, the identification was done through Gram Sabha only in four Taluks viz, Bengaluru South and Anekal in Bengaluru Urban district, Devanahalli in Bengaluru Rural district and Shivamogga in Shivamogga district. In other two Taluks namely Bengaluru North(Bengaluru Urban district) and Maddur (Mandya district), besides Gram Sabha other methods were resorted e.g. newspaper advertisement, Department staff choosing interested beneficiaries and obtaining BPL card and other documents through Panchayat Development Officers (PDOs). However, the study team could not find any proof of selection of beneficiaries through Gram Sabha in the aforementioned instances. In Madhugiri Taluk of Tumakuru District, the selection was made by institution heads while in Tiptur Taluk (Tumakuru district), newspaper advertisement was inserted and the selection was made by drawing lottery. In Hoskote Taluk, the selection was as per the list provided/prepared by MLA and ZP member.

11.2.5 Political interference in implementation of the scheme was wide spread in almost all the Taluks. While it was limited to selection of beneficiaries in most of the Taluks, it was relatively more in Bengaluru North Taluk. According to a State Government official who does not want to be identified, the birds were required to be handed over to local leaders for distribution. As a result of this, the Department neither had control over number of birds to be supplied per family nor on reconciliation of family wise actual number of birds supplied. The families in these Taluks received very small number of birds (as low as two in number). The leaders resorted to this, mainly to cover as many families as possible within the available number for distribution.

11.2.6 The bird distribution process in this Taluk turned out to be a near riot situation in Chikkajala area due to large collection of not only the beneficiaries but also other people at the time of bird distribution. The study team does not have any hard evidence or proof to this. However, the fact was corroborated with other people/beneficiaries available at the time of visit, who confirmed that the state of affairs mentioned above. More number of beneficiaries required to be covered at the behest of the local leaders/politicians not only resulted in distribution of very few birds to some of the families, but also defeated the efforts of the Department officials to record beneficiary wise details of number of birds supplied and reconcile the same with total birds received.

11.2.7 The above situation/state of affairs lead to conclude that perhaps those close to the decision makers might have benefitted in short term and birds supplied proved to be a gift to them rather than a means of survival/supplementary income generating asset.

11.2.8 Because of the reasons cited above, 880 birds were distributed among the families. The details about the birds distributed with reference to No. of birds per family and No. of families vis-à-vis total birds distributed are furnished in the frequency distribution table (No.18). The average per family works out to 10 birds or so.

Table 18: Frequency distribution of birds supplied among the families in Bengaluru North

Sl.no.	Particulars	Details of distribution							
1	Families(No)	1	1	2	35	1	21	25	86**
2	Total Birds	2	3	8	175	7	210	475	880**
3	Birds/Family	2	3	4	5	7	10	19	10*

*Average birds per family **Grand Total

11.2.9 Although Gram Sabha was one of the modes of selection in some of the Taluks, the dates of Gram Sabhas were not available/recorded in the Department, as a result the study team could not access the data to arrive at the time lapse between the date of Gram Sabha and the date on which the first batch of 20 birds (if the first batch was less than 20 then the date on which 20th bird) was received. The respective beneficiary families also could not recollect the dates of the Gram Sabha in which they were selected.

11.2.10 An uniform simplified application form for the beneficiaries was not prescribed. In some Taluks application forms were devised at Taluk level for use. However, such forms lacked

certain essential details like BPL card no. date of issue, date and recommendations of the Gram Sabha, details about availability of backyard space, training in poultry farming received if any by the beneficiary, etc. and also did not indicate the copies of the documents to be enclosed along with application form.

11.2.11 Out of the 247 families interviewed, only 30 families (12%) from two Taluks received 20 or more number of birds as first batch. Four families out of 10 families from Tiptur Taluk received 20 birds each as first batch, while 26 families from Maddur received 30 birds each as the first batch.

11.2.12 The birds were sourced from public sector organizations like State Poultry Farms (SPF), University, Regional/District Poultry Farms, Poultry Extension Center(PEC) except in one of the Taluks(Madhugiri) of Tumakuru District where out of 5400 birds, 1800 (33%) were procured from a private person namely, Musaddin Ahmed B. s/o Abdul Jaheer R/o Balluru, Nagamangala, District Mandya. No provision was there in the scheme for such procurement. A scanned copy giving the relevant extract (item No. 2.3) of the interview schedule (PART D) for AH officials is furnished as **Annexure G**.

11.2.13 As per the checklist enclosed to GOI letter No. 43-23/2009-LDT(P) dated 26.04.2011 the cluster areas/pockets were to be selected where only the unorganized sector is present i.e. commercial, industrial or even SME is not present. The cluster areas/pockets selected for scheme implementation do not appear to fulfill this criterion. In fact one of the districts viz, Bengaluru Rural has the highest contribution of 15.28% of total poultry population in the State. Besides, Bengaluru Rural district the other five districts covered under the scheme viz, Bengaluru Urban, Ramanagara, Tumakuru and Mandya as also Shivamogga appear to be better developed commercially/industrially as compared to some other districts. Less developed districts like Udipi, Chikkamagaluru, Dharawada, Haveri. Uttara Kannada, Gadag, Yadgir, Vijayapura, Kalburgi, Raichur, Bidar etc. could have been considered.

11.2.14 Further it was observed that the BPL beneficiaries from Taluks bordering Bengaluru were found to be affluent and this defeats the very purpose of the scheme viz. provision of

subsidiary income and nutrition to the family. For example, the beneficiaries (nine interviewed by the study team) from Doddipalya village in Agara Gram Panchayat of Bengaluru South Taluk (Benagaluru Urban District) were found to be from well-to-do families who owned spacious cement concrete houses, high end gadgets (plasma TV, refrigerator) and cars. These beneficiaries possessed BPL cards. As their economic status has changed, there is a need for revising the BPL list is recommended in such cases.

11.2.15 It would have been prudent on the part of State Government to select less developed districts and resource poor beneficiaries for scheme implementation.

11.2.16 The number of batches and numbers of birds supplied to families was not uniform across the different Taluks and within the families.

11.2.17 The birds were supplied in three batches to 49 families (20%) and in two batches to 44 families (18%) while the remaining 154 families (62%) received the birds in single batch. The details of total number of families from different Taluks who received birds in one, two and three batches, respectively are furnished in Table No. 19 and graphically presented in Figure Nos. 1 & 2.

Table 19: Taluk wise No. of Families vis-à-vis No. of Batches received by the families

Sl.no.	Taluk	No. of families and the year in which birds were given			Total families covered and Year
		Single Batch	Two Batches	Three Batches	
1	Hoskote	10 (2013-14)	0	0	10 (2013-14)
	Devanahalli	34 (2014-15)	0	0	34 (2014-15)
Bengaluru Rural		44 (2013-15)	0	0	44 (2013-15)
2	Bengaluru South	11 (2014-15)	0	0	11 (2014-15)
	Bengaluru North	86 (2014-15)	0	0	86 (2014-15)
	Anekal	11 (2013-14)	0	0	11 (2013-14)
Bengaluru Urban		108 (2013-15)	0	0	108 (2013-15)
3	Maddur (Mandya)	0	35 (2014-16)	0	35 (2014-16)
4	Tiptur	0	2 (2013-14)	8 (2013-14)	10 (2013-14)
	Madhugiri	0	0	20 (2014-15)	20 (2014-15)
Tumakuru		0	2 (2013-14)	28 (2013-15)	30 (2013-15)

Sl.no.	Taluk	No. of families and the year in which birds were given			Total families covered and Year
		Single Batch	Two Batches	Three Batches	
5	Ramanagara	0	5 (2013-14)	12 (2013-15)	17 (2013-15)
6	Shivamogga	2 (2013-14)	2 (2013-15)	9 (2013-15)	13 (2013-15)
Total		154 (2013-15)	44 (2013-16)	49 (2013-15)	247 (2013-16)
		62	18	20	100

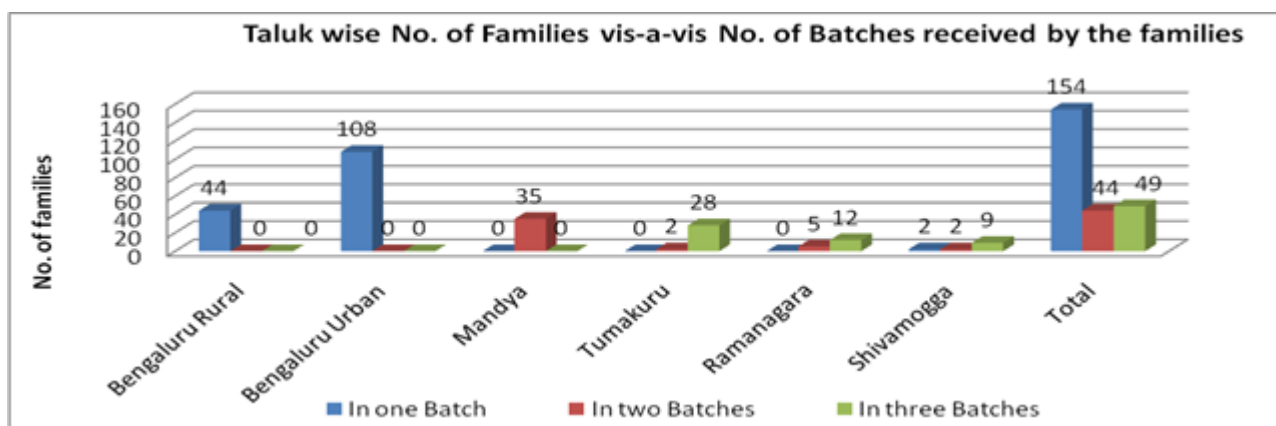


Figure 1: Taluk wise No. of Families vis-a-vis No. of Batches received by the families.

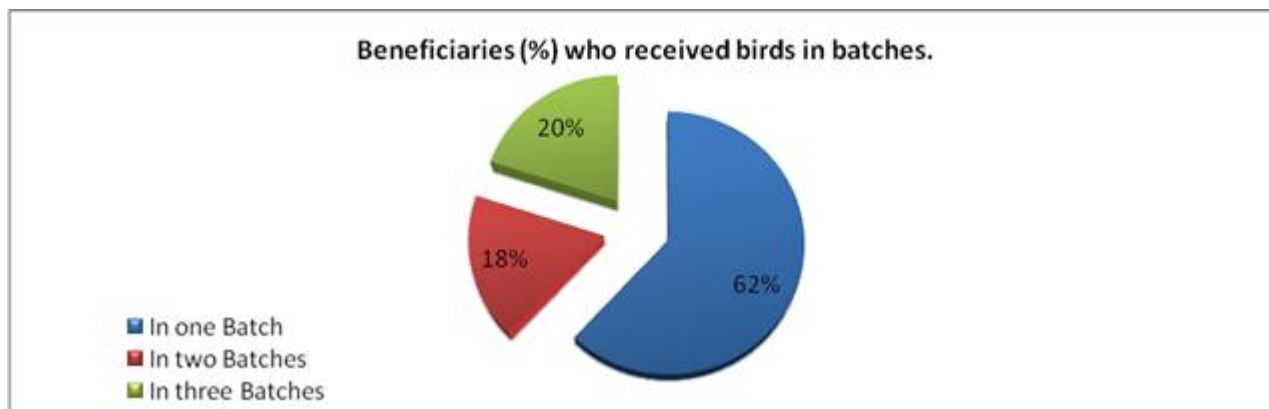


Figure 2: Percentage of Beneficiaries who received birds in batches

11.2.18 Where the birds were supplied in more than one batch (i.e. in two or three batches), the interval between supply of batches was not uniform across the Taluks. The time lapse between

supply of first and second batch in case of 93 families ranged from 8 to 36 weeks while the same between supply of second and third batch ranged from 5 to 47 weeks. The details are furnished in Table No. 20 and graphically presented in Figure No. 3

Table 20: Taluk wise time lapse in weeks, where supply of birds was in 2nd & 3rd batches.

Sl.no.	Taluk	Time lapse in weeks between batches (1&2 and 2&3)					
		2 nd Batch			3 rd Batch		
		Families	Time lapse as against 16 weeks	Year	Families	Time lapse as against 16 weeks	Year
1	Maddur	35	36	2014-16	N.A.	N.A	---
2	Ramanagara	17	8*	2013-15	12	47	2013-15
3	Tiptur	10	8	2013-14	8	5	2013-14
4	Madhugiri	20	15	2014-15	20	20	2014-15
5	Shivamogga	11	33	2013-14	9	32	2013-14
	Total	93	8-36(Range)	2013-16	49	5-47(Range)	2013-15

*weighted average arrived at as the beneficiaries received the birds on different dates.

Whereas in all other Taluks the date of receipt of batch was the same.

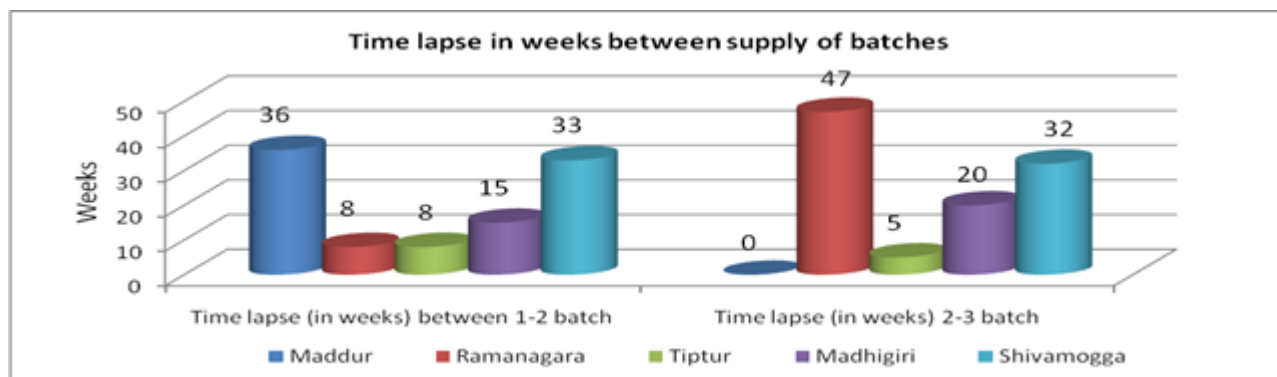


Figure 3: Time lapse in weeks between supply of batches

11.2.19 Further, the batch sizes (no. of birds per batch) in different batches (i.e. First, second and third batch) were not uniform across the Taluks. The details are furnished in Table No. 21:

Table 21: Taluk wise number of families and average batch sizes (No. of birds)

Sl.no.	Taluks	I Batch		II Batch		III Batch	
		Families	Birds	Families	Birds	Families	Birds
1	Hoskote	10	15	0	0	0	0
2	Devanahalli	34	15	0	0	0	0
3	Bengaluru South	11	15	0	0	0	0
4	Bengaluru North	86	10	0	0	0	0
5	Anekal	11	14	0	0	0	0
6	Maddur	35	26	35	15	0	0
7	Tiptur	10	17	10	16	8	14
8	Madhugiri	20	15	20	15	20	15
9	Ramanagara	17	10	17	11	12	24
10	Shivamogga	13	14	11	11	9	13
	Overall	247*	15**	93*	14**	49*	17**

* Total no. of families **weighted average

11.2.20 The scheme had a provision of Rs. 750 per family for supply of night shelter/cages, poultry equipment like Feeders, Waterers etc. for 20 birds. This provision was not at all utilized for 158 (64%) out of the 247 sampled beneficiaries. These 158 beneficiaries belong to six Taluks viz., Hoskote (10), Devanahalli (34) [in Bengaluru Rural district], Bengaluru South (11), Bengaluru North (86) and Anekal (11) [in Bengaluru Urban district] and Shivamogga Taluk & district (6 out of the 13 beneficiaries).

11.2.21 The provision of Rs.750 was inadequate. In Maddur (35 families) and Shivamogga (7 families out of 13) were provided poultry equipment viz. feeder and waterer @ one each per family. While in Ramanagara (17 families), Tiptur (10 families) and Madhugiri (20 families) along with feeder and waterer, chick mesh was also provided within the available provision for supply of equipment.

11.2.22 These inputs should have been supplied at the appropriate time (ideally, the same should have been supplied at least at the time of supply of first batch, if not earlier).The bio shelter was

not provided along with the 1st batch of birds except in case of 13 beneficiaries (5% of the total sample). These beneficiaries were from Ramanagara and Shivamogga Taluks. The details of supply of inputs in Ramanagara and Shivamogga Taluks are furnished in Table No. 22:

Table 22: Details of Supply of inputs vis-a-vis birds

Sl.no.	Particulars/Details of inputs supply	Ramanagara	Shivamogga	Total
1	Sampled Beneficiaries(nos.)	17	13	30
2	Inputs received (No. of families)	17	7	24
3	Inputs received along with I Batch	7	6	13
4	Inputs received along with II Batch	0	1	1
5	Inputs received along with III Batch	9	0	9
6	Inputs received 7 weeks after receipt of last batch and 21 weeks after receipt of I Batch	1	0	1

11.3 Follow up by Department on health and life of birds

11.3.1 The Department officials claimed that there was regular follow up. However, all the beneficiaries reported that there was no guidance from the Department side on the major aspects like culling of layers and excess males, type of cages to be fabricated for the safe keeping of birds etc. In view of this, the following scenarios were observed in the field:

- a. The hens were disposed off when they reached peak production and also during the peak production period. The overall average age at which the hens were culled was 41 weeks (range 10-75 weeks). The layers should have been maintained all through their economic life (up to say 73 weeks). Out of the 247 beneficiaries interviewed, only 19 beneficiaries (8%) retained the hens during the entire productive life span (73-75 weeks). The Taluk wise details are furnished in table no. 23.

Table 23: Taluk wise no. of beneficiaries retaining hens up to the end of productive phase

Sl.no.	Districts	Taluk	Total beneficiaries.	Of which No. retaining hens up to 73 weeks or so.	Percentage to total who kept hens up to 73 weeks
1.	Bengaluru Rural	1. Hoskote	10	2	20
		2. Devanahalli	34	5	15

Sl.no.	Districts	Taluk	Total beneficiaries.	Of which No. retaining hens up to 73 weeks or so.	Percentage to total who kept hens up to 73 weeks
	Sub total		44	7	16
2.	Bengaluru Urban	1.Bengaluru North	86	0	0
		2. Bengaluru South	11	2	18
		3.Anekal	11	0	0
	Sub total		108	2	2
3.	Mandya	1.Maddur	35	6	17
4.	Ramanagara	1.Ramanagara	17	1	6
5.	Tumakuru	1.Tiptur	10	3	30
		2.Madhugiri	20	0	0
	Sub total		30	3	10
6.	Shivamogga	Shivamogga	13	0	0
	Grand total		247	19	8

- b. It was observed that the overall average age of males at culling was 39 weeks (range 20-59 weeks). Thus excess males were reared beyond the market/slaughter age. Further, the average weight of the culled males ranged from 3 to 3.93 Kg. In general, birds beyond 2-2.50 kg body weight are not acceptable in markets by common consumers on economic (high price/ bird) and/or family considerations (nuclear/small families).
- c. The cages prepared on their own by some of the beneficiaries had tiers one above the other without removable base. The droppings of the birds from the upper tiers fell on the body of the birds in lower tiers. California type cages should have been fabricated to avoid such a situation. The removable base could have helped in proper and easy cleaning of the cages.

In view of the above, impact of the follow-up, if any, by the department was not visible in various crucial aspect of care/management of the birds, reduction in mortality, improvement in economics of the venture etc.

11.3.2 Considering the scenario as emerging above it may be suggested that close follow up on the lines indicated below is a must for successful implementation of the programme:

- a. On the day the birds are distributed, an official from DAH&VS may be identified/designated as a relationship/liaison officer for a particular beneficiary/group of beneficiaries from

respective villages who will be accountable/responsible for undertaking follow up visits to the beneficiaries/villages at prescribed interval on fixed days/dates as per inspection schedule.

b. A suitable system/procedure may be developed to check/verify as to whether visits are made as per the frequency/days/dates indicated in the prescribed schedule to ensure that defaults do not recur/repeat in future (A reasonable delay for visits up to say couple of days or so, may be allowed and not to be considered as default).

11.4 Production performances

11.4.1 Although the bird chosen by the Government was right, the birds didn't perform up to the standards at the field level due to multifarious reasons at various levels/stages.

The body weight at eight weeks, adult males (24 weeks) and adult females (24 weeks) were 0.95 kg, 3.53 kg and 3.16 kg, respectively. As per the leaflet published by UAS, Hebbal, Bengaluru, the body weight (lower range) at the respective life stages are 1.60 kg, 4.50 kg and 3.50 kg. The average weights observed in case of the sample beneficiaries were lower by 41%, 22% and 10%, respectively against the said life stages.

The Taluk wise details of body weight gain are furnished in Table No. 24 and graphically presented in Figure No. 4:

Table 24: Weight in Kg at different life stages of birds

District	Taluk	8 Weeks	16 Weeks	24 Weeks Male	24 Weeks Female
Bengaluru Rural	Devanahalli	0.76	1.74	3.48	3.03
	Hoskote	1.22	2.28	3.89	3.50
Bengaluru Rural overall weighted Average		0.87	1.86	3.58	3.14
Bengaluru urban	Anekal	1.00	2.00	3.00	3.50
	Bengaluru north	1.00	1.99	3.40	3.05
	Bengaluru south	0.85	1.75	3.72	3.11
Bengaluru urban overall weighted average		0.98	1.96	3.39	3.11
Mandya	Maddur	1.00	2.00	3.70	3.24
Ramanagara	Ramanagara	0.99	2.00	3.50	3.00

District	Taluk	8 Weeks	16 Weeks	24 Weeks Male	24 Weeks Female
Shivamogga	Shivamogga	0.77	2.35	3.93	3.78
Tumakuru	Madhugiri	1.00	2.00	3.41	3.11
	Tiptur	1.00	2.00	NA	3.00
Tumakuru overall weighted average		1.00	2.00	3.45	3.05
Overall (all Taluks) weighted average		0.95*	1.98	3.53*	3.16*
Standard Error		0.014		0.026	0.025
Coefficient of variation (%)		20.62		9.76	10.23
Ref: KVK Solapur success story/RFP document		1.30		4.40	3.50
Actual results lower than above standards (%)		26.92		19.77	9.71
As per the leaflet of UAS, Hebbal, Bengaluru		1.60		4.50	3.50
Actual results lower than above standards (%)		40.63		21.56	9.71

***Significant at 1%**

11.4.2 By running the test of significance, it was found that there is a significant difference between observed field level data and data quoted in UAS Hebbal leaflet as also economic traits mentioned in success story of KVK Solapur at 1% level of significance.

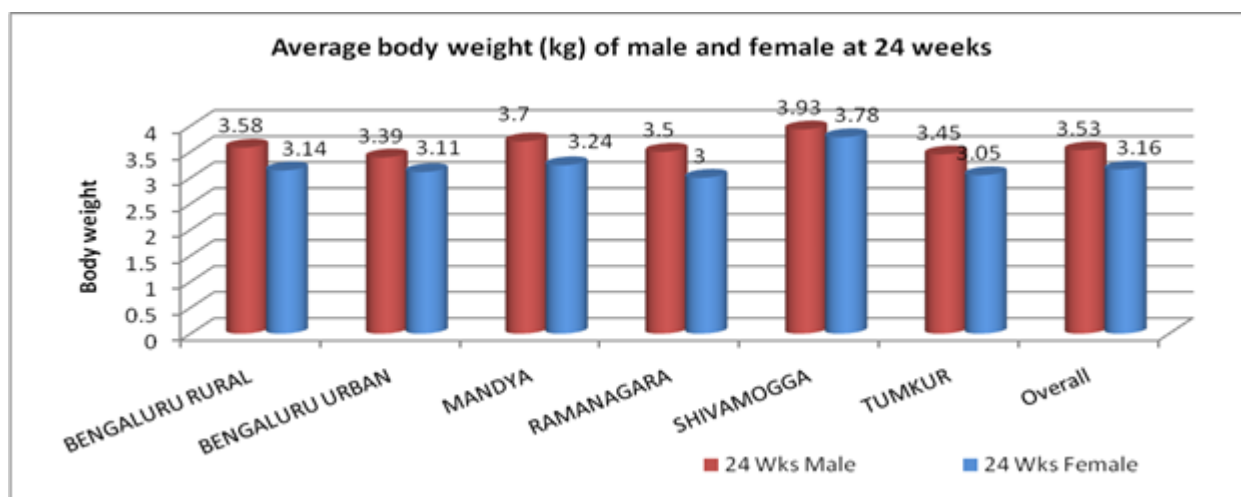


Figure 4: Average body weight (Kg) of male and female at 24 weeks

11.4.2 The KVK has documented the findings in the form of success story titled ‘Empowerment of Rural women (belonging to SHGs) through backyard poultry using Giriraja Breed’. The

average egg production capacity (104) was lower by 5% as against the results observed by KVK Solapur as documented in the above mentioned success story.

11.4.3 The birds were culled before the end of/ completion of their productive life span. The overall average age at which hens were culled was found to be 41 weeks. This is far lower than the generally accepted economic life of 73 weeks. The details are furnished in Table No. 25 and graphically presented in Figure No. 5.

Table 25: Taluk wise Age (weeks) at which cocks and hens culled

District	Taluk	Cock	Hen	Range (Hens)
Bengaluru Rural	Devanahalli	59	60	36-75
	Hoskote	53	57	30-73
Bengaluru Rural overall weighted average		57	59	30-75
Bengaluru Urban	Anekal	31	31	24-34
	Bengaluru north	34	35	16-54
	Bengaluru south	52	53	25-75
Bengaluru urban overall weighted average		37	37	16-75
Mandya	Maddur	34	34	16-75
Ramanagara	Ramanagara	35	35	20-75
Shivamogga	Shivamogga	20	27	10-75
Tumakuru	Madhugiri	32	32	24-34
	Tiptur	50	54	25-75
Tumakuru overall weighted average		40	42	24-75
Overall (all Taluks) weighted average		39	41	10-75

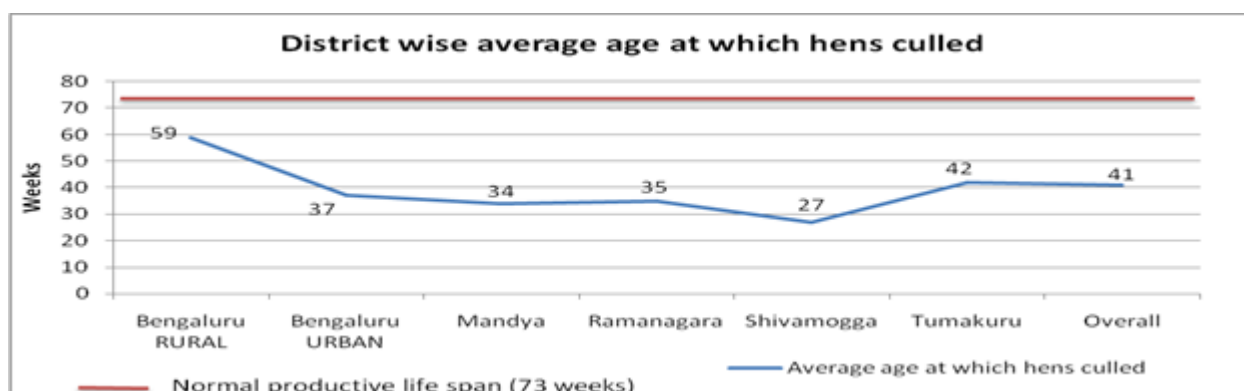


Figure 5: Average age at which hens culled

11.4.4 The average annual egg production was around 104 eggs per hen. During the course of interactions with the beneficiaries the study team observed that average Hen Day egg production per hen reported/claimed by the beneficiaries ranged between 100-150 eggs.

However, in Shivamogga Taluk out of the total 13 beneficiaries, 9 beneficiaries reported egg production of which four beneficiaries claimed very high egg production (170, 200, 250 and 300 eggs). Since large variation was observed in their claims, the data pertaining to egg production for Shivamogga district were not taken (outliers) into account for the limited purpose of arriving at the egg production. In case of remaining 234 beneficiaries, only 81 beneficiaries reported egg production for the respective laying periods during which they had retained the hens. Hence egg production per hen per week (H.D basis) was calculated with reference to annual (52 weeks) egg production of 100 eggs per hen vis-à-vis the No. of weeks the hens remained with the beneficiaries during the laying period (21-73 weeks). Based on the above assumptions/criteria, Taluk wise average egg production per hen per year has been calculated. The details of egg production performance are furnished in Table No. 26.

Table 26: Taluk wise average egg production per hen per year

District	Taluk	Total Beneficiaries	Families reporting production		Average of Eggs/year
			No.	Percentage	
Bengaluru Urban	Anekal	11	3	27.27	93
	Bengaluru North	86	12	13.95	112
	Bengaluru South	11	7	63.64	110
Bengaluru Urban Average		108	22	20.37	109
Bengaluru Rural	Devanahalli	34	29	85.29	110
	Hoskote	10	5	50.00	103
Bengaluru Rural Average		44	34	77.27	109
Mandya	Maddur	35	14	40.00	96
Tumakuru	Madhugiri	20	1	5.00	40
	Tiptur	10	8	80.00	96
Tumakuru Average		30	9	30.00	90
Ramanagara	Ramanagara	17	2	11.76	79
Grand Total		234	81	34.62	104*
Standard Error					4.01
Coefficient of Variation (%)					34.81
The economic trait referred in KVK Solapur success story (Lower range)					120
Actual production of 104 eggs lower than the one referred in success story (%)					13
As observed at farmers' field in the KVK Solapur success story					110
Actual production (104 eggs) lower than the one observed under farmers' field (%)					5
As per the leaflet of UAS, Hebbal, Bengaluru (lower range)					140
Actual results lower than above standards (%)					26

* Significant at 1%

11.4.5 By running the test of significance, it was found that there is a significant difference between observed field level data and data quoted in UAS Hebbal leaflet as also economic traits mentioned in success story of KVK Solapur at 1% level of significance with regard to egg production.

11.4.6 The average egg weight was 64 gm. This average does not include data for Shivamogga as there was very wide variation in reporting the data. Out of the 13 beneficiaries, 10 beneficiaries reported egg weight between 75-300 gm (i.e. 75, 150 and 300 gm by one beneficiary each, 80 gm by 5 beneficiary and 100 gm by two beneficiaries). Details are given in Table no. 27

Table 27: District wise average egg weight

District	Total families	Of which responses considered	% of responses considered	Average of Egg weight (gm)
Bengaluru Rural	44	9	20	64
Bengaluru Urban	108	20	19	63
Mandya	35	6	17	65
Ramanagara	17	1	6	65
Tumakuru	30	7	23	64
Grand Total	223	43	18	64*
Standard error				0.35
Coefficient of variation (%)				3.56
Average egg weight as per leaflet published by UAS Hebbal, Bengaluru				65
The average egg wt. in case of sampled beneficiaries is lower (%) than UAS Hebbal				1.56

*** Significant at 1%**

By running the test of significance, it was found that there is a significant difference between observed field level data and data quoted in UAS Hebbal leaflet at 1% level of significance with regard to egg weight.

11.5 Mortality

11.5.1 The overall mortality was 49.52% of which 22.91% was due predation. The Taluk wise details are furnished in Table No. 28 and graphically presented in Figure No. 6.

Table 28: Taluk wise No. of birds supplied and Mortality (%) due to predation and diseases

District	Taluk	Total Birds	Mortality %		
			Predation	Diseases	Overall
Bengaluru Rural	Devanahalli	510	24.12	9.02	33.14
	Hoskote	149	32.89	8.05	40.94
Bengaluru Rural overall wt. Average		659	26.10	8.80	34.90
Bengaluru Urban	Anekal	155	20.65	30.32	50.97
	Bengaluru north	880	23.86	44.55	68.41
	Bengaluru south	165	38.79	3.64	42.42
Bengaluru Urban overall wt. Average		1200	25.50	37.08	62.58
Mandya	Maddur	1434	11.99	30.26	42.26
Ramanagara	Ramanagara	670	21.34	7.91	29.25
Shivamogga	Shivamogga	428	35.05	22.20	57.24
Tumakuru	Madhugiri	900	33.67	41.67	75.33
	Tiptur	440	15.23	14.77	30.00
Tumakuru overall weighted average		1340	27.61	32.84	60.45
Overall (all Taluks) weighted average		5731	22.91	26.61	49.52

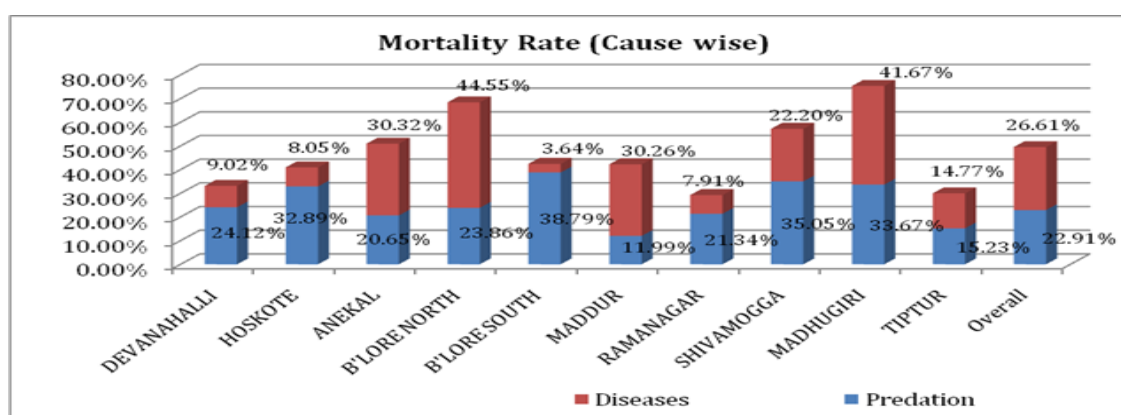


Figure 6: Mortality Rate (Cause wise)

11.5.2 The loss of birds due to predators like stray dogs and cats, wild animals (Mongoose, in vernacular called Keera) ranged from 12-39%. The beneficiaries could have prevented the same with little extra care/attention and proper protection (night shelter). The beneficiaries didn't have amenities like adequate and proper night shelter for the birds. Night shelter was provided to only 89 beneficiaries (36%) out of the 247 beneficiaries. This is one of the major reasons for death due to predation. Availability/supply of night shelter should precede receipt of birds at the farmers' level to ensure protection of birds from predators.

11.5.3 The average mortality due to disease was 26.61% which also includes deaths on account of stress. In Madhugiri (Avg. 42%) and Maddur (Avg. 30%), transit mortality on account of stress was a major factor. In Maddur stress was due to wrong handling of birds while in Madhugiri, the season (summer) coupled with time of day while transporting the birds led to stress. In Maddur, the beneficiaries reported that the birds supplied were very weak (probably due to under feeding to save cost on their rearing). Such weaklings could not survive when they were brought and reared at beneficiaries places (i.e. from brooding/ rearing house to scavenging condition).

11.5.4 In four Taluks viz., Bengaluru South (4%) Ramanagara (8%), Hoskote (8%), and Devanahalli (9%) the average mortality due to disease & stress incidence was less than 9 %, which is close to the figures quoted by CPDO & TI for Rural layers in their publication (Management Guide for Rural Poultry).

11.5.5 As per the scheme implemented by GOK, birds raised up to four weeks of age were to be supplied to beneficiaries. At the age of four weeks perhaps the birds might not have become sufficiently hardy and fit/ready for distribution. It would have been advisable to supply the birds after completion of the minimum brooding period of say six weeks. In view of this, the birds needed special care and management at beneficiaries' level, particularly proper brooding practices to avoid likely cold stress during the transition period (from rearing house to backyard of the beneficiary). This was totally missing in the absence of any training/ guidance to beneficiaries in this regard. On reaching the beneficiaries' farms, the birds were let out immediately/suddenly under free range management system. Since the birds were under

intensive system of rearing at the Government rearing centers, the transition could have been gradual/slow/step by step i.e. from intensive management system to semi-free range/intensive and then free range system. The improved birds do need initial brooding of six weeks period. Moreover, the poultry birds are known to have very strong conditioned reflexes. This could have been the major reason for mortality.

11.5.6 There was no sensitive support mechanism, guidance available to beneficiaries after supply of birds.

11.5.7 The birds were not transported at beneficiaries door step in proper manner. In Maddur (Mandya district) the birds were delivered at the Taluk Head Quarters and the beneficiaries transported them to the respective villages on their own. The beneficiaries formed groups among themselves and hired a common vehicle (mini truck) to transport the birds without any compartmentalization; as a result the birds got scared/stressed and died because of huddling/stampeding/piling.

11.5.8 The birds were supplied to the beneficiaries at four weeks of age due to which the vaccination against important disease like Fowl pox (at 6th week), was missed.

11.5.9 The birds were supplied free of cost under the programme. As there was no financial stake involved beneficiaries did not take requisite care and interest in rearing the birds.

11.5.10 In the absence of proper skill up gradation training, guidelines, recommendations, the farmers didn't take up preventive medications (anti stress drugs like electrolytes, antibiotics etc.) for the birds on their arrival at their place.

11.5.11 The farmers should be supplied six weeks old birds i.e. after completion of minimum brooding period of six weeks. As mentioned above, at six weeks major vaccinations would have been received by the birds to ensure better immune response. Secondly, their escaping capacity/self-defense from predators will be more pronounced at six weeks than at four weeks of age.

11.5.12 The farmers should be given intensive training. There should be follow up and regular interactions with the farmers for getting feedback after supply of birds. Health and advisory services should be provided at farmers' doorstep.

11.5.13 Out of the 10 Taluks, the DAH&VS officials from six Taluks reported that they had imparted training. These Taluks are-Devanahalli, Bengaluru North, Bengaluru South, Ramanagara, Madhugiri and Shivamogga. In Madhugiri Taluk one day workshop was held for farmers. However all the 20 beneficiaries interviewed indicated that they did not receive any training. In Bengaluru South Taluk the training was imparted through Kisan Sampark Sabha, which was held on 18.06.2013 in Doddajala village (venue-temple) while the birds were supplied on 04.06.2014 i.e. almost one year after the Kisan Sampark Sabha was held. In Devanahalli the training was imparted (venue-primary school) on the day the birds were supplied. However, during the interview of the beneficiaries from Devanahalli Taluk, 18 beneficiaries (53%) out of 34 beneficiaries replied in the affirmative when questioned as to whether training was received by them. While in Bengaluru North the reply of all the 86 beneficiaries was in the negative. Incidentally, one of the beneficiaries from Devanahalli Taluk had undergone eight days training at Hessarghatta. Similarly, one of the beneficiaries from Tiptur Taluk had undergone six days training at Hessarghatta (location-AH&VS Research farm) in the year 2013 who received first batch of 15 birds on 18.12.2013. In Ramanagara training was in the form of field visit. However, none of the 17 sampled beneficiaries made a mention about such field visit when questioned about the receipt of training by them. In Shivamogga Taluk also although DAH&VS official replied in the affirmative when asked as to whether training was arranged for the scheme beneficiaries, all the 13 sampled beneficiaries replied the relevant question in the negative. One of the beneficiaries in Shivamogga mentioned that her family member (husband) had undergone training. Out of the 247 beneficiaries, 91 (37%) indicated that they had previous experience in rearing desi birds under backyard and envisaged no problem in rearing Giriraja birds. In Shivamogga, out of 13 sampled beneficiaries, 9 beneficiaries (69%) indicated that besides having previous experience, they interactions with veterinary officers encouraged them to going for rearing of Giraraja birds although no training

was received by them. The DAH&VS official from Hoskote Taluk indicated that training was not imparted as no budget was made available.

11.6 Scheme benefits

11.6.1 The nutritional and financial status of the family improved as a result of supply of income generating assets in the form of Poultry birds. However, there was no appreciable sustainability of the income as none of the beneficiaries sourced new chicks from the relevant sources for their future use. Further, as the Giriraja birds are of synthetic strain, they are not expected to breed true to type. Out of the 247 families 90 families (36%) were having Giriraja birds on the day of the visit. The Taluk wise details of No. of birds available/seen with the beneficiaries vis-à-vis time lapse (in weeks) from supply of last lot/batch are given in Table no. 29

Table 29: Taluk wise no. of families found to have Giriraja birds on the day of visit

Sl.no	Taluk	Total families	Of which having birds	% to total	Total birds supplied	Birds present (M+F)	Time lapse in weeks from supply of last batch
1	Hoskote	10	2	20	149	1+7=8	124
2	Devanahalli	34	8	24	510	5+15=20	65
Bengaluru Rural		44	10	23	659	6+22=28	65-124
3	Anekal	11	0	0	155	NA	99
4	Bengaluru South	11	03	27	165	3+14=17	78
5	Bengaluru North	86	33	38	880	27+59=86	78
Bengaluru Urban		108	36	33	1200	30+73=103	51-63
6	Maddur	35	18	51	1434	24+51=75	63
7	Ramanagara	17	10	59	670	28+70=98	75-124
8	Tiptur	10	6	60	440	13+52=65	92
9	Madhugiri	20	6	30	900	6+9=15	38-52
Tumakuru		30	12	40	1340	19+61=80	38-92
10	Shivamogga	13	4	31	428	2+8=10	49
Grand total		247	90	36	5731	109+285=394	38-124

11.6.2 Out of the 247 families nil/zero return either from eggs or meat (both as opportunity cost/value through consumption and sale) was reported by 43 families due to cent per cent mortality of the birds (777 birds). The Taluk wise details are furnished in Table No. 30:

Table 30: Taluk wise details of beneficiaries reporting zero/nil return from both Egg and Meat.

Taluk	Total Families	Zero return	%	Total Birds	Batches	Batch size	Deaths
Devanahalli	34	3	9	45	1	15	45
Hoskote	10	1	10	15	1	15	15
Bengaluru Rural	44	4	9	60	1	15	60
Anekal	11	2	18	30	1	15	30
Bengaluru North	86	29	34	204	1	Feb-19	204
Bengaluru South	11	1	9	15	1	15	15
Bengaluru Urban	108	32	30	249	1	Feb-19	249
Madhugiri	20	7	35	315	3	Each batch of 15	315
Total	247	43	17	777			777

NB1- In Ramanagara, Maddur and Shivamogga Taluks all the beneficiaries reported some income.

2- For calculating % of families reporting nil return, total sample size of 247 is considered.

3- In all the Taluks from Bengaluru Rural and Bengaluru Urban only single batch was supplied. Hence, the district average is considered as one and accordingly mentioned against district total.

4- The individual beneficiary wise details where nil return was reported due to 100% mortality are given in Appendix J

11.6.3 The overall average meat and egg production with reference to 247 families was 216 eggs and 32 Kg of meat. Out of this overall average production per family, 23 Kg of meat and 174 eggs (i.e. 72% of average meat production and 80% of egg production) was used for home consumption. (In a way, the average production of 216 eggs and 32 kg of meat per family can be very well obtained by maintaining two hens for egg production/laying purpose and the 32 kg of meat can be obtained by rearing around say ten birds or so).

11.6.4 Assuming five members per family on an average, the per capita annual meat and egg consumption works out to 4.6 Kg and 35 eggs. In rural areas the egg production is the lowest (between 5-20 eggs per capita). Due to obvious reasons, there is a great disparity in egg consumption among Urban, semi-urban and rural areas. The disparity in consumption pattern

in rural and Urban areas is mainly due to non-availability of eggs, as the layer industry is concentrated mainly in Urban and peri-urban areas of the country. Taluk wise details of average production of meat and eggs per beneficiary are furnished in Table No. 31 and graphically presented in Figure Nos. 7 & 8.

Table 31: Taluk wise average Meat (Kg) and Egg (No) production per family

District	Taluk	Average Meat Production (Kg)			Average Egg Production (Nos.)		
		Consumed	Sold	Total	Consumed	Sold	Total
Bengaluru Rural	Devanahalli	15.59	22.99	38.57	306	138	444
	Hoskote	10	20.35	30.35	123	75	198
Bengaluru Rural overall wt. Average		14.32	22.39	36.7	264	127	388
Bengaluru Urban	Anekal	22.82	0	22.82	87	0	87
	Bengaluru north	6.68	0.34	7.02	92	0	92
	Bengaluru south	18.14	9.36	27.5	283	40	323
Bengaluru Urban overall wt. Average		9.58	1.22	10.71	111	4	115
Mandya	Maddur	50.67	8.17	58.84	175	74	246
Ramanagara	Ramanagara	53.88	4.09	57.97	382	0	382
Shivamogga	Shivamogga	26	20.85	46.85	86	20	102
Tumakuru	Madhugiri	8.2	16.03	24.23	43	0	43
	Tiptur	79.7	9.6	89.3	464	200	664
Tumakuru overall weighted average		32.03	13.88	45.92	183	67	250
Overall (all Taluks) weighted average		22.94	8.74	31.68	174	43	216*
% to total/share in total		72.41	27.59	100	80	20	100

Difference due to rounding off has been ignored/not accounted for

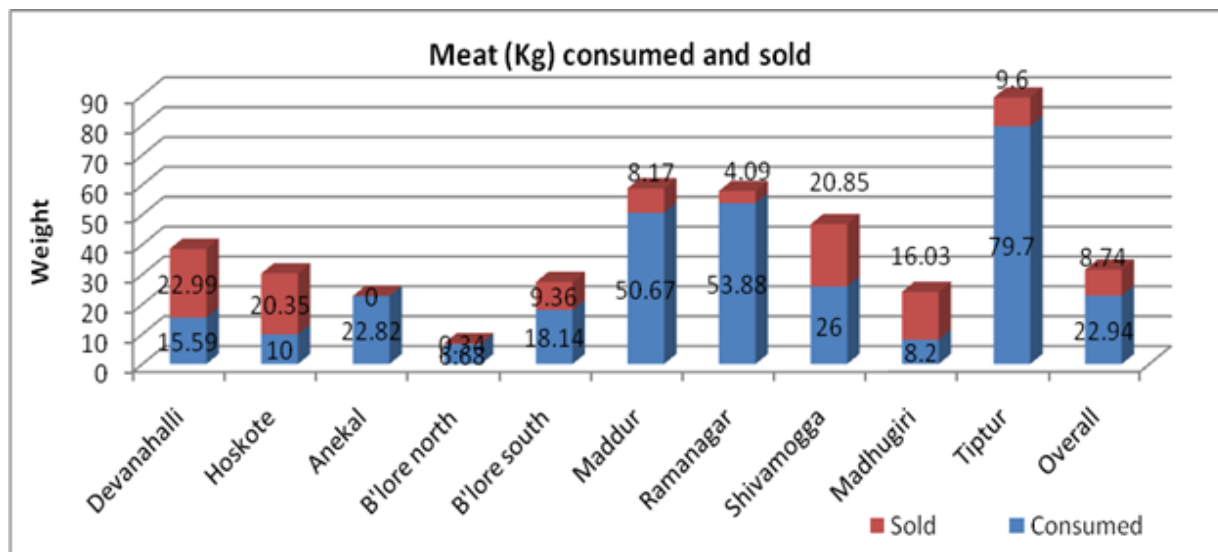


Figure 7: Meat (Kg) consumed and sold

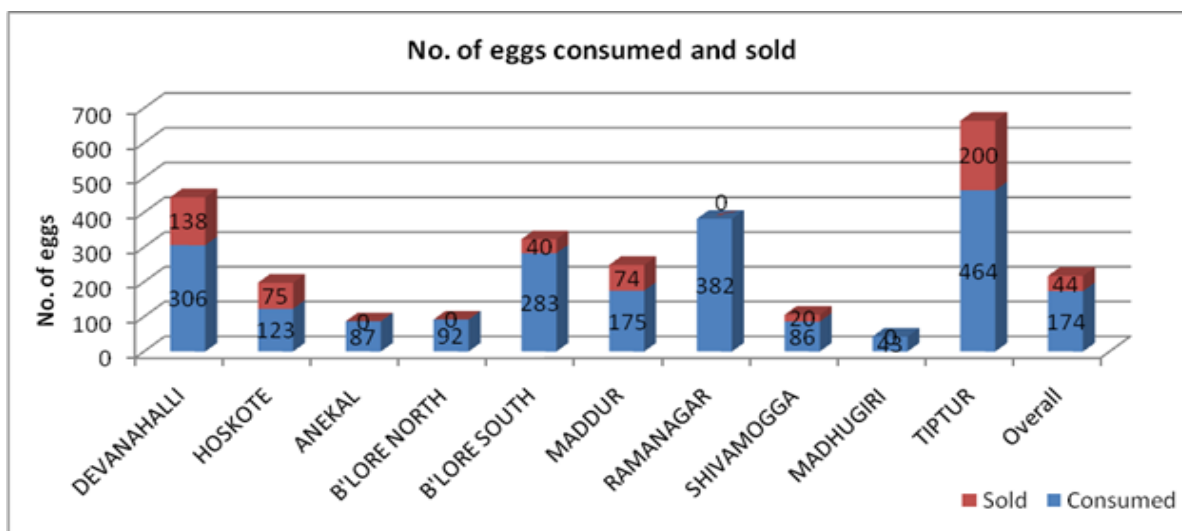


Figure 8: No. of eggs consumed and sold

11.6.5 The production performance is dependent on plane of nutrition and other management parameters. It was observed that there was total lack of supplementary feed supply to the birds. Almost all the beneficiaries indicated that they did not follow the practice of supplementary feeding of birds. This has adversely affected the performance in terms of body weight gain and egg production. No periodic de worming was followed. Further, not all the beneficiaries were having adequate scavenging area/access which would have provided the basic feed needed for

sustenance. Although the protein requirement of the bird can be met through scavenging, in general, there is every possibility that birds may remain energy deficient as also calcium deficient. The supplementary feeding could have taken care of such likely deficiencies. Hence, for better results and to sustain production under free-range conditions, supplementary feeding is expected/may be essential.

11.6.6 To know the average income earned by the family, consumption of meat and eggs has been converted in to value of meat and egg consumed. This value/income is added to the sale of meat and eggs obtained from the unit and the total income per beneficiary with reference to total 247 beneficiaries was worked out. It is observed that the overall income earned by the family works out to Rs. 5,791 comprising of Rs 4541 (78%) from meat and Rs 1250 (22%) from eggs. Out of the total income Rs. 5791, the utilization for home consumption was Rs 4201 (73%). In case of home consumption the share of meat in financial terms was 77% and that of eggs was 23%. The Taluk wise details are furnished in Table No. 32 and graphically presented in Figure No. 9.

Table 32: Taluk wise average income from Meat and Egg per family w.r.t 247 families

Taluk	Meat (Value/Income)			Egg (Value/Income)			Total/Family
	Consumption	Sale	Total	Consumption	Sale	Total	
Devanahalli	2141	3524	5665	1501	638	2140	7804
Hoskote	1500	3053	4553	635	405	1040	5593
Bengaluru Rural	1995	3417	5412	1305	585	1890	7302
Anekal	3485	0	3485	376	0	376	3862
Bengaluru North	947	51	998	462	0	462	1460
Bengaluru South	2875	1586	4461	1474	231	1705	6166
Bengaluru Urban	1402	202	1604	556	24	580	2184
Maddur	6809	1211	8020	995	571	1567	9587
Ramanagara	8200	613	8813	2159	0	2159	10972
Shivamogga	3158	3104	6023	740	215	956	6979
Madhugiri	1130	2249	3379	213	0	213	3591
Tiptur	11955	1440	13395	3480	2000	5480	18875
Tumakuru	4738	1979	6717	1302	667	1968	8686

Taluk	Meat (Value/Income)			Egg (Value/Income)			Total/Family
	Consumption	Sale	Total	Consumption	Sale	Total	
Overall	3239	1307	4541	962	288	1250	5791
Percentage	55.93	22.57	78.41	16.61	4.97	21.59	100.00

Errors due to rounding off may please be ignored

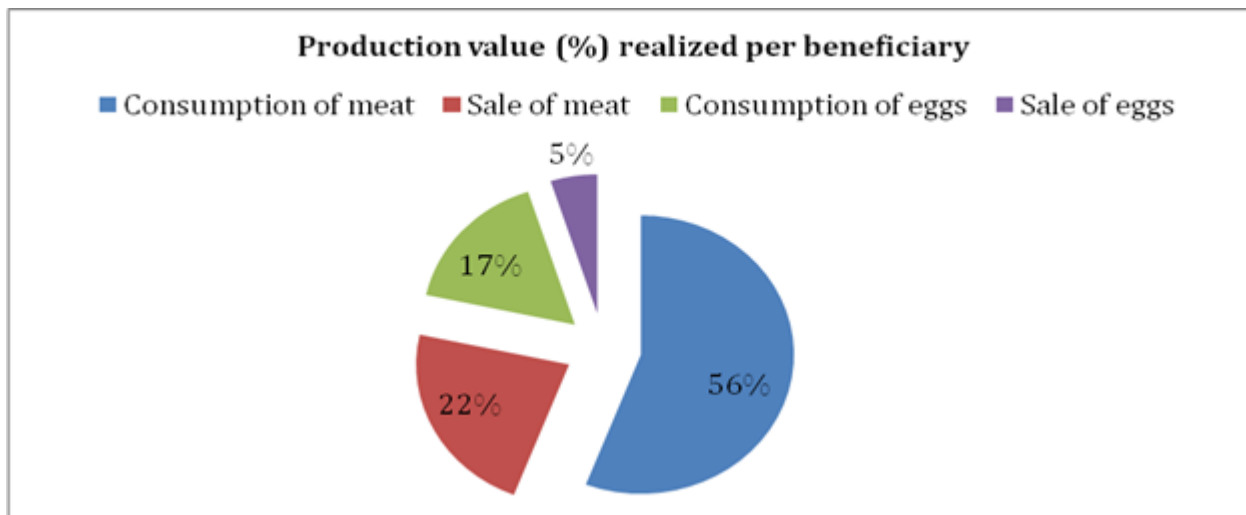


Figure 9: Production value (%) realized per beneficiary

11.6.7. The total income earned by the 247 families was to the extent of Rs. 14.30 lakh. The Taluk wise details are furnished in Table No. 33

11.6.8 It can be safely concluded that in spite of number of shortcomings, the key objectives of the program i.e. subsidiary income and nutrition to the family have been reasonably achieved. The overall average income earned per family was around Rs. 5791.

Table 33: Taluk wise aggregate value (Rs) of poultry products (Meat and Eggs)

District/Taluk	Consumption Value/Income			Cash Income from sale			Overall income
	Meat	Eggs	Total	Meat	Eggs	sale	
Devanahalli	72780	51050	123830	119820	21700	141520	265350
Hoskote	15000	6350	21350	30525	4050	34575	55925
Bengaluru Rural	87780	57400	145180	150345	25750	176095	321275
Anekal	38340	4140	42480	0	0	0	42480

District/Taluk	Consumption Value/Income			Cash Income from sale			Overall income
	Meat	Eggs	Total	Meat	Eggs	sale	
Bengaluru North	81475	39725	121200	4350	0	4350	125550
Bengaluru South	31625	16210	47835	17450	2540	19990	67825
Bengaluru Urban	151440	60075	211515	21800	2540	24340	235855
Maddur	238305	34835	273140	42400	20000	62400	335540
Ramanagara	139400	36700	176100	10425	0	10425	186525
Shivamogga	41050	9625	50675	37250	2800	40050	90725
Madhugiri	22600	4250	26850	44970	0	44970	71820
Tiptur	119550	34800	154350	14400	20000	34400	188750
Tumakuru	142150	39050	181200	59370	20000	79370	260570
Overall	800125	237685	1037810	321590	71090	392680	1430490
% to total	55.93	16.62	72.55	22.48	4.97	27.45	100.00

11.7. Radiatory/Demonstration effect.

11.7.1. Out of the 66 nieghbours, only four nieghbours (6%), two farmers each from Ramanagara and Tiptur Taluks were willing to take up rearing of Giriraja bird considering higher returns and nutritional benefits although they perceived risk of predators. In case of remaining 62 nieghbours, 46 perceived risk of predators and diseases. Another neighbor from Shivamogga also felt that there is high mortality. Seven nieghbours from Bengaluru North Taluk felt that local birds are better and there is risk of predators in case of improved fowls. Three persons from Anekal were willing to take up improved fowl in spite of risk of predators if birds were provided free. Two nieghbours from Anekal showed interest in Giriraja. However, they complained that they were not identified as beneficiary under the scheme. One neighbour from Shivamogga was also awaiting free distribution. Two persons from Shivamogga were interested to take up backyard poultry but they felt that in the absence of certain facilities and man power to look after the unit, they are not able to take up Giriraja birds. The responses received from the nieghbours about Giriraja birds are summarized in Table No. 34.

Table 34: Responses from neighbours about their perceptions about inclusion of Giriraja in their flock.

Sl.no.	Particulars/type of response	Number	% to total
I	Reasons for not willing to take up Giriraja		
A	Perceived risk of predators and diseases	46	70
B	High Mortality	1	1
C	Local birds better and perceived risk of predators	7	11
	Subtotal (Not willing to take up Giriraja)	54	82
II	Willing to take up Giriraja considering high returns in spite of risk of predators	4	6
III	Willing to take up conditionally/with rider		
A	If identified as scheme beneficiary	2	3
B	If birds provided free	3	5
C	Awaiting free distribution	1	1
	Subtotal	6	9
IV	Willing to take up but feel own constraints like lack of facilities and man power	2	3
	Grand total	66	100

11.7.2 All the 247 beneficiaries interviewed confirmed that there was not a single person to their knowledge who had gone for improved fowls as backyard poultry by seeing their units.

11.8 Inclusion of Giriraja fowl under backyard poultry farming

11.8.1 Out of the 26 other backyard poultry farmers' interviewed 13 farmers (50%) have included Giriraja fowl. Out of these two had exclusive flock of Giriraja (10 & 30 birds), while the remaining had Giriraja birds ranging from 2-15 along with local fowls.

11.8.2 Out of 13 farmers who have introduced Giriraja fowl, one farmer has reverted to local fowl as he felt that the Giriraja bird has failed his expectations. Seven farmers included the bird on account of nutritional benefits, while one farmer introduced the bird for experimental purpose. The remaining three farmers indicated better/faster growth, more number of eggs, early maturity and production on expected lines as the reasons for inclusion of Giriraja.

11.8.3 The remaining 13 beneficiaries did not include Giriraja fowl as they perceived risk of predators. At the same time they complained that they were left out from the scheme.

11.9 Integration/ Continuity of the scheme through captive chicks production

11.9.1 The Giriraja hen is a poor brooder/sitter. She has reduced brooding instinct and also doesn't exhibit prominent brooding behavior. As such she lacks brooding and mothering ability. Being a synthetic strain Giriraja cannot breed true to type in beneficiaries/farmers' field. As a result the rearer of Giriraja bird may have to depend on breeders/intermediaries for replacement stock. Nevertheless, some of the beneficiaries got hatched fertile eggs obtained from Giriraja hens by using local/native broody hens. However, such instances were very insignificant/far and few (only 5% of the beneficiaries). The progenies of the birds (which were obtained through natural brooding) were present at the time of field visit in three Taluks viz. Hoskote, Ramanagara and Tiptur. These beneficiaries received the last batch during the year 2013-14. The details in this regard are furnished in Table no. 35:

Table 35: Beneficiary families who have hatched chicks through natural brooding

Sl.no	Taluk	Total families	Of which having Progeny	Present progeny (M&F)			Supply of last batch (Year)	Date of supply of last batch
				Male	Female	Total		
1	Hoskote	10	2	1	7	8	2013-14	26.06.2013
2	Ramanagara	17	4	11	30	41	2013-14	05.08.2013
3	Tiptur	10	6	13	52	65	2013-14	05.02.2014
Total from 3 Taluks		37	12	25	89	114	2013-14	2013-14

11.9.2 Above all, the main reason for not continuing/expanding/scaling up the poultry farming activity with Giriraja fowl by the beneficiaries could be due to total lack of extension and follow up efforts. Nonetheless, majority of the beneficiaries have appreciated the profitability of the Giriraja fowl over desi fowl. The beneficiaries are willing to support the scheme even with providing 20-50% contribution towards the cost.

11.10 Perception of the beneficiaries about qualities of Giriraja fowl.

11.10.1 So far as the performance of the Giriraja fowl is concerned, the beneficiaries were quite happy as they could derive substantial economic benefits by rearing Giriraja birds.

11.10.2 The other good qualities indicated by the beneficiaries include, inter alia, better/faster growth, higher body weight gain, bigger sized eggs, premium prices for both meat (ranging from Rs. 100-Rs. 250/kg live weight) and eggs (ranging from Rs.5-Rs.10/egg), higher production of both meat and eggs, better taste of meat, early maturity, and persistency in laying.

11.10.3 The Giriraja birds are a byproduct of broiler breeding programme and being heavy built, are rather sluggish. The beneficiaries also indicated that the Giriraja birds are sluggish/ lazy, have strong smell, always required attention. Beneficiaries also opined that Giriraja birds are prone to predators due to lack of self-protection ability and they have low resistance power against diseases and hatching of eggs is not a feasible proposition. Hence, there is a need to ensure that these birds are protected properly. The Giriraja birds do have certain promising features. In fact all the birds under backyard have predation threat. The Giriraja bird has perhaps higher predation threat. While the local/desi birds have highest escaping capacity, all the improved strains of backyard poultry are prone to predation. The only plus point in case of improved strain should be to have lesser/lower predation threat.

11.11. Scheme Performance.

11.11.1 In financial terms, the achievement of GOK was 45% as at the end of the year 2014-15 (Out of Rs 231.50 lakh released by GOI, the GOK had utilized Rs 104.25 lakh from 2011-12 to 2014-15).

11.11.2 The Centrally Sponsored Rural Backyard Poultry Development Scheme of the Ministry of Agriculture (MOA), Department of Animal Husbandry and Dairying (DAH&D) of Government of India (GOI) was implemented by the Department of Animal Husbandry and Veterinary Services (DAH&VS) of Government of Karnataka (GOK) since, 2011 in six districts (Bengaluru Rural, Bengaluru Urban, Ramanagara, Mandya, Tumakuru and Shivamogga) of the state. The total number of beneficiaries covered during the three year period from 2012 to 2014-2015 stood at 8731 (1743 + 3371 + 3617).

11.11.3 As per para 6 of GOI letter number 43-8/2011-LDT (P) dated 04-07-2011 Low Input Technology (LIT) Breeding Stock maintained and reared by State Poultry Farms (SPFs) is to be distributed to BPL

beneficiaries. As per Annexure A of the said letter an amount of Rs 240.50 lakh for 10500 BPL beneficiaries was recommended for release which comprised Rs 78.75 lakh towards fixed costs for cages/night shelter and other inputs like feeders/drinkers etc. and Rs 141.75 lakh for birds (4,72,500 No's). The unit rate for per beneficiary worked out to Rs 750 towards fixed costs for 20 birds and Rs 1350 for 45 birds (@ Rs 30 per bird). As per Annexure IIB of GOI letter No. 43-23/2009-LDT (P) dated 26-04-2011, the 45 reared birds (4 weeks) were to be given to BPL families in installments after checking progress at 16th and 32nd week. The batch size being 20, 15 and 10 as indicated/mentioned vide evaluation question No.2 of the Terms of Reference (TOR).

11.11.4 During the three year implementation period, GOK covered 8731 beneficiaries and distributed 1, 79,012 birds (around 20+ birds per beneficiary).

11.11.5 The aggregate existing chick production capacity of state Government is around 6 lakh plus chicks per annum from the existing parent stock of 5,500 parents. Against these, a total of 1.79 lakh chicks were utilized under the scheme during the three year implementation period. As such adequate rearing facilities may perhaps be the main reason for low progress rather than shortage.

11.11.6 Hence due to shortage of raised birds, all the beneficiaries didn't receive the required number of birds.

11.11.7 It will be seen from the above that GOI expected to cover 10,500 beneficiaries against which 8731 beneficiaries have been covered under the scheme which means 83% target is achieved on terms of coverage of beneficiaries. However, the total birds required to be distributed worked out to 4, 72,500 @ 45 birds per beneficiaries. Against this 1, 79, 012 birds were supplied achieving 38% target in terms of supply of birds.

11.11.7 There is lot of demand for improved fowls and there is no reason for short fall in targets provided physical and financial provisions are made in time and the scheme implementation procedure is streamlined along with regular follow-up from State level.

11.11.8 The program was implemented over a period of 3 years (2012-13 to 2014-15).

11.11.9 During the first year of implementation (2012-13), the scheme was implemented in two districts viz, Bengaluru Urban (all four Taluks) and Ramanagara Districts (One Taluk i.e. Ramanagara Taluk).

11.11.10 During the subsequent two years (2013-14 and 2014-15) the program was scaled up and the scheme was implemented in additional four districts viz., Bengaluru Rural, Mandya, Tumakuru and Shivamogga.

11.11.11 The targets for two districts namely Bengaluru Rural and Bengaluru Urban were not available for all the implementation years i.e. 3 years and two years, respectively. As such comparison of achievements with the targets could not be attempted for the above two districts. The achievements with respect to targets for number of families as also number of birds for the three year period in case of remaining four districts are furnished in Table No. 36.

11.11.12 The overall achievement for the three year implementation period was 55% in case of coverage of beneficiaries while with reference to number of birds, the achievements was 35%.

11.11.13 In Tumakuru District, achievement was cent per cent both in terms of number of beneficiaries and number of birds during the year 2013-14.

11.11.14 Although during the year 2014-15, the achievement in Tumakuru District was 100% in terms of number of beneficiaries covered, it was 33% with reference to number of birds.

11.11.15 During the year 2013-14, the achievement with reference to no. of families was cent per cent in Ramanagara and Shivamogga district. However, in terms of number of birds, the same worked out to 36 and 40%, respectively.

Table 36: Year wise targets and achievements under the scheme in respect of four districts

Sl.no.	Districts	No. of Taluks	No. of families covered			No. of birds distributed		
			Target	Achievement	%	Target	Achievement	%
A	2012-13							
1	Ramanagara	4	600	120	20	27000	1200	4
B	2013-14							
1	Ramanagara	4	600	600	100	27000	9644	36
2	Mandya	7	1800	211	12	81000	10770	13
3	Tumakuru	3	448	448	100	20160	20160	100
4	Shivamogga	7	900	900	100	40500	16270	40
Annual total		21	3748	2159	58	168660	56844	34
C	2014-15							
1	Ramanagara	1	130	100	77	5850	1500	26
2	Mandya	7	1800	962	53	81000	32062	40
3	Tumakuru	2	177	177	100	7955	2655	33
4	Shivamogga	4	-	-	-	-	6394	-

Sl.no.	Districts	No. of Taluks	No. of families covered			No. of birds distributed		
			Target	Achievement	%	Target	Achievement	%
Annual Total		14	2107	1239	59	94815	42611	45
D	3 Year total							
1	Ramanagara		1330	820	62	59850	12344	21
2	Mandya		3600	1173	33	162000	42832	26
3	Tumakuru		625	625	100	28115	22815	81
4	Shivamogga		900	900	100	40500	22664	56
All year total			6455	3518	55	290475	100655	35

Source: Data furnished by Deputy Directors (AH&VS) in response to KEA letter CAH/Poultry/KEA/2014-15 dated 24.12.2014. The same was made available to NABCONS by KEA.

11.11.16 The overall achievement under the scheme in the six districts, with reference to number of beneficiaries and number of birds after taking into account the achievements for the two districts Viz, Bengaluru Rural and Bengaluru Urban is summarized in Table No. 37.

Table 37: Overall achievements under backyard poultry development scheme in six districts.

Sl.no.	Particulars/Districts	Years	Beneficiaries		Birds	
			Nos.	%	Nos.	%
1	Four Districts	All years (Table no.22)	3518	40	100655	56
2	Bengaluru Rural	2 years (2013-15)	1809	21	24834	14
3	Bengaluru Urban	3 years (2012-15)	3404	39	53523	30
Grand Total		All years	8731	100	179012	100

11.11.17 In absence of any other reason emanating from the evaluation done within the scope of the evaluation study, it appears that non availability of birds for implementation of the programme may be the only reason for low progress in all the above six districts for the respective years. During the three year period a total of 1.79 lakh chicks were distributed as against the existing production capacity of around six lakh chicks from 5500 parents.

11.11.18 The Government of Karnataka under a franchisee arrangement with Karnataka Veterinary animal and fisheries sciences university, Veterinary College Bengaluru undertakes breeding and rearing of Giriraja parent stock. During the year 2014-15, the production was 7, 01,667 Giriraja eggs and 3, 28,659 chicks, respectively. Under plan schemes, activities covered

under poultry development has been a. short term training, b. rearing and sale of Giriraja birds (distribution and sale of Giriraja chicks and six week old Giriraja birds) and c. assistance for establishment of broiler poultry for unemployed youths. During the year 2014-15, GOK had distributed and sold 14,580 Giriraja chicks and 43,410 six week old Giriraja birds under the rearing and sale of Giriraja birds activity.

11.11.19 For the year 2014-15, the DAH&VS had annual target of rearing 1, 12,600 Giriraja chicks in Government farms. Against these the department had reared 1, 18,617 Giriraja chicks for supply under various socio-economic schemes of which 1, 12,600 Giriraja birds were earmarked to women beneficiaries under Karnataka Mahila Abhirudhi Yojane. Under this scheme, Giriraja birds reared up to 8 weeks and protected against all contagious diseases are distributed to all categories rural women on no loss no profit basis. (Minimum of five birds are distributed to each women beneficiary at the rate fixed by the Department Animal Husbandry and veterinary services).

11.11.20 The existing aggregate capacity of state government hatcheries is 5500 parents. These hatcheries are being modernized to have semi automation in certain operations. After modernization vis-à-vis capacity expansion, the aggregate capacity of hatcheries will be 15000 parent birds and chick production will be around 17 lakh (16, 87,500) chicks.

11.11.21 The location wise additional capacities of six hatcheries on completion of modernization are listed in Table No. 38.

Table 38: Location wise additional capacities (No. of parents) being created by DAH& VS

Sl.no.	Location/Name of the Govt Farm/Hatchery	Additional capacity (No. of Parents)
1	Hesaraghatta (State poultry farm)	3000
2	Malavalli, District Mandya	1500
3	Bangarapete, District Kolar	1000
4	Kudige	1000
5	Gundlupete District Mysuru	1000
6	Koila District Dakshina Kannada	2000
	Total additional capacity being created	9500

11.11.22 There is a need to earmark the requirement of chicks on priority basis for implementation of backyard poultry farming scheme to BPL families.

11.12. Suggested changes for effective scheme implementation

11.12.1. The beneficiaries need doorstep delivery of quality and sensitive services in terms of extension, preventive and curative health services.

11.12.2 The birds may be supplied at beneficiaries' doorstep through proper transport arrangement. Birds may be transported/shifted during the cooler parts of the day. The supply of birds should be cost effective and should not involve long distance transport. The birds should be delivered FoB/FoR. Free birds (additional) should be supplied to take care of transit mortality and weaklings. The GOK has provision for supply of 3% free chicks. This provision may be extended in case of raised birds also. Presently no free raised birds were supplied to the beneficiaries covered under the scheme. The cost incurred in this regard should be automatically factored in while arriving at the price per bird.

11.12.3 The farmers should have access to regular supply of birds, preferably in the vicinity of their area of operation. Further the supply should be cost effective. The supply of birds should be assured first, before scheme implementation. A proper delivery chain needs to be established.

11.12.4 There is a need to shift the focus from free supply of various services.

11.12.5 The beneficiaries' selection should be as per section 3A (3) (C) of Karnataka Panchayat Raj Act 1993 and only those families Below Poverty Line (BPL) may be selected under the scheme.

11.12.6 Only those families having backyard space as well as scavenging space with access for free feed may be selected. Further, the total number of birds to be supplied to a particular family may depend on availability of backyard space/ scavenging area with source of free feed.

11.12.7 Presently the chick supply to 24 Poultry Extension Centres (PECs) for rearing up to 4-6 weeks of age might be adequate, considering the present six lakh chick production capacity of the six hatcheries. It seems that the missing link is absence of Mother/rearing/nursery units to

raise required number of chicks for the programme. Hence establishment of mother/nursery/rearing units may form essential sub component of the scheme.

11.12.8 NGOs/VAs/SHGs/community organizations may be involved in selection of families, entrepreneurs for setting up mother units.

11.12.9 A proper linkage between such rearing units may be established and delivery schedules of chicks/raised birds may be declared in advance and followed up/observed.

11.12.10 The input prices particularly in respect of raised birds may be factored in properly while arriving at the cost of birds that are procured from the suppliers (PECs/mother units) to ensure that under age/underfed birds are not supplied on account of economic consideration (the farmers felt that under age/underfed birds were supplied as the hatcheries/rearing units could not manage to grow the chicks due to lower per bird price fixed under the scheme). The prices may be revised from time-to-time, to take care of the increase in cost.

11.12.11 The hatch dates, body weight of the birds at the time of distribution may be indicated/informed by the hatcheries/rearing units to farmers and all those involved in scheme implementation.

11.12.12 The raised birds after completion of brooding stage (6 weeks are so) may be made available instead of the present system of supply of 4 weeks old birds. In the process the birds would have completed vaccinations for Ranikhet (F1/Lasota) and Fowl pox which will ultimately lead to higher survival rate.

11.12.13 Birds may be supplied after sexing so that the farmers get sexed birds (cocks or pullets) depending on their preference vis-à-vis the objective of meat or egg production.

11.12.14 The extension and health services may be geared up so that constant interaction with the beneficiaries is possible and midterm corrective actions can be taken to make the scheme successful.

11.12.15 The scheme may be implemented under PPP mode to ensure adequate production and supply of day old chicks, cocks and pullets for which proper backward and forward linkages need to be established.

11.12.16 The chick and raised birds production from state Government farms may be earmarked to the extent of the requirement of the programme, well in advance.

11.12.17 The farmers as well as those involved in scheme implementation may be given skill up gradation training.

11.12.18 For ensuring owning of the scheme/program by the beneficiaries, the grant/subsidy component may be reduced from the present level of 100%.

11.13 Need for investment in the Rural Backyard Poultry Scheme.

11.13.1 The benefits of the scheme have not reached the beneficiaries in its entirety due to the implementation issues. As the scheme is still relevant in terms of providing nutritional and financial stability to the rural poor, the Government should scale up the programme with improved implementation guidelines. Incidentally, a Government of Karnataka has submitted a proposal for implementation of rural backyard poultry development scheme (central 27% and state 25%) in 27 districts (excluding Mandya, Tumakuru and Shivamogga).

11.13.2 The scheme can harness the commercial potential available in the backyard poultry sector through establishment of separate small scale, self-sustainable poultry production enterprises by rural poor.

11.13.3 The need for Government to continue its investment in this sector can be bolstered by the following developments in the sector:

- a. The share of rural poultry in total poultry population at national level is 52% and its contribution to nutritional (animal protein) and livelihood security (supplementary income) is significant.
- b. The rapid strides made by organized poultry have overshadowed the importance vis-a-vis contribution of rural household poultry.

- c. The backyard poultry, (a common sight in rural area where non-descript/local/desi/native fowls are maintained under scavenging/free range conditions by landless agricultural labourers, small and marginal farmers), needs to be commercially leveraged in a systematic and focused way so that it proves complimentary and sustainable occupation for them. This can only be possible by introducing suitable/appropriate breed of fowl.
- d. The vision to develop a suitable breed for backyard rearing may be traced back to more than three decades ago and release of Giriraja breed happens to be the first initiative in this direction.
- e. The improved fowls like Giriraja, CARI GOLD, Gramapriya are prone for predation. This is one of the draw backs. To tackle this, a good number of breeds like KrishnaJ, CARI NIRBEEK, CARI SHYAMA, UPCARI, HITCARI, RAJASRI etc. have been developed with a view to incorporating all desirable traits of native chicken breeds in the new genotype. These efforts of breeders from public and private sectors need to be supported by popularizing these birds under back yard poultry through development of location specific package of practices.
- f. It may not be quite appropriate to neglect the consumer demand for eggs and chicken meat in rural areas. The back yard poultry will help to create a source of production in rural areas, thereby augmenting the supply of poultry products in rural areas with least harvest losses and without elaborate arrangements for storage and transportation of these products. At present the harvest losses are more than 3% in eggs and can be reduced considerably as length of retention from probable day of lay to consumption will be minimum in case of products from rural back yard poultry. Secondly, freshness of eggs coupled with short storage and transit period will not adversely affect the internal quality of eggs.
- g. The investment in back yard poultry will help to reduce poverty. Considering the potential of back yard poultry, it can prove to be a micro enterprise/good practice/tool for addressing major issues like food security, unemployment, risk spreading through subsidized income. Thus, back yard poultry can provide an effective means/contribution to poverty reduction. Hence, needs to be tapped in a positive way rather than bypassing.
- h. The growth in poultry sector need not be primarily driven by large scale commercial farms as our country needs balance d and inclusive growth.
- i. The Government of Karnataka has taken up modernization of existing poultry farms. The parent breeding capacity is being increased by creating additional capacity of 9500 birds parents taking the total capacity after modernization to 15000 birds parents (173% increased). The present capacity is 5500 parents.

11.14 Entrepreneurship mode

11.14.1 The scheme may be implemented under entrepreneurship mode with subsidy/grant component not exceeding 75%. However, in case of women and Physically Handicapped (PH)/differently abled beneficiaries, the subsidy/grant component may be up to 100%. Incidentally, under a socio-economic programme viz. “Karnataka Mahila Abhivridhi Yojane” one of the schemes identified by GOK for women has been supplied/distribution of raised Giriraja birds (minimum of five birds) of 8 weeks of age to all categories of rural women at 100% subsidy. (The rate of the bird is to be fixed by the DAH&VS on “no loss and no profit” basis).

11.14.2 The support can very well be considered on an entrepreneur mode. Due to the prevailing cent per cent subsidy/grant component, the present programme was not owned by the beneficiary.

11.14.3 Out of the 247 beneficiaries, only one viz., Ms. Bhagya from Shivamogga did not show willingness to contribute. In fact she expected that additional inputs like feed, medicine etc. should be supplied. Her present experience was not good as out of 30 birds she lost 20 (2/3rd) birds to predators while the remaining birds were not reared beyond 12 weeks and were used for home consumption.

11.14.4 The remaining 246 beneficiaries expressed willingness to contribute their own margin ranging from 20-50%. The Taluk wise details are summarized in Table No. 39 and graphically represented in Figure No.10.

Table 39: Taluk wise number of beneficiaries’ willing to contribute margin money

Sl.no.	District	Taluk	No. of beneficiaries willing to contribute					Total
			0%	20%	25%	30%	50%	
1	Bengaluru Rural	Hoskote	0	0	0	0	10	10
		Devanahalli	0	0	34	0	0	34
Sub total			0	0	34	0	10	44
2	Bengaluru Urban	Bengaluru North	0	0	61	0	25	86
		Bengaluru South	0	0	0	0	11	11
		Anekal	0	0	11	0	0	11

Sl.no.	District	Taluk	No. of beneficiaries willing to contribute					Total
			0%	20%	25%	30%	50%	
	Subtotal		0	0	72	0	36	108
3	Mandya	Maddur	0	0	33	0	2	35
4	Tumakuru	Tiptur	0	0	0	0	10	10
		Madhugiri	0	0	20	0	0	20
	Sub total		0	0	20	0	10	30
5	Ramanagara	Ramanagara	0	0	0	0	17	17
6	Shivamogga	Shivamogga	1	3	4	1	4	13
	Grand Total		1	3	163	1	79	247
	% to total		0.5	1.0	66.0	0.5	32.0	100.0

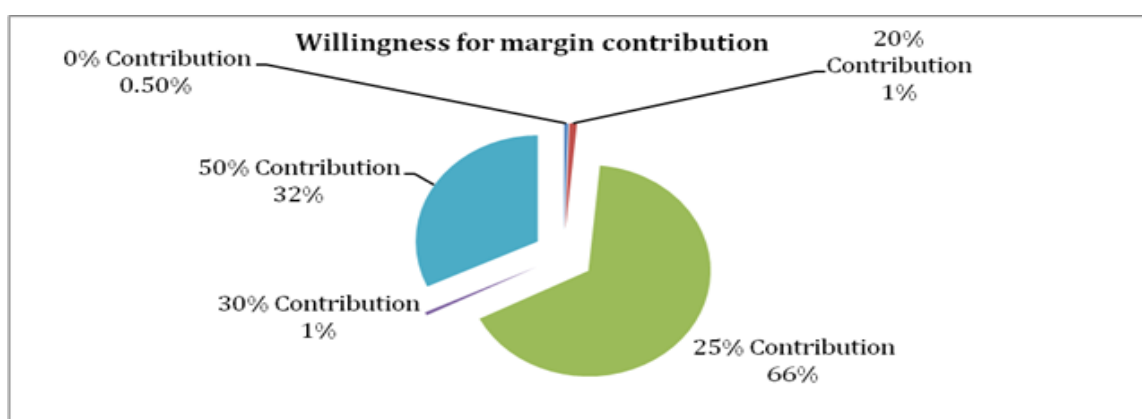


Figure 10: Willingness for margin contribution

11.14.5 About two thirds (66%) of the beneficiaries numbering 163 showed willingness to contribute 25% margin followed by 79 beneficiaries (32%) who were willing to contribute 50% margin. Out of the remaining beneficiaries, 3 are willing to contribute 20% and one beneficiary each 30% and zero %, respectively.

11.15 Summary of the findings.

The findings of the study indicated vide para 5.1 to 5.14 with reference to the relevant evaluation questions (1-14) are summarized in the executive summary in seriatim. Besides this, a summary of the same is also given in Annexure I.

Chapter 12

Limitations and constraints in the Evaluation Study

12.1. Scheme Guidelines

12.1.1 The study team did not have access to specific and clear-cut guidelines issued by the Directorate of Animal Husbandry and Veterinary Services. Discussions with Deputy Director (Poultry), Directorate of AH & VS, Bengaluru 56001, revealed that the beneficiary should be belonging to BPL category and the bird to be supplied should be of Low Input Technology (LIT) as indicated vide: para six of GOI letter NO. 438/2011 LDT (P) dated 04.07.2011. The study team also obtained a copy of GOI letter No. 4323/2009 LDT (P) 26.04.2011.

12.1.2 The above two letters read with Terms of Reference of the study were used by the study team for conducting the evaluation study.

12.1.3 The various observations during the study were based on the above premises, in the absence of specific and clear cut guidelines reduced to writing in the form of separate circular by the Department.

12.2. Data availability

12.2.1 The vital statistics was not readily available both at Department level and at the beneficiaries' level.

12.2.2 The study involved evaluation of the scheme for the period 2012-13, 2013-14 and 2014-15. Most of the beneficiaries did not possess the birds, as the economic life of the birds got over. (In five out of the 10 Taluks, the productive life span of the birds i.e. 73 weeks was over with reference to the last batch of birds supplied to them). As a result, the study team entirely relied on the recalling capacity of the beneficiaries while recording the observations pertaining to important parameters like no. of eggs laid, egg weight, body weight gain at various life stages, mortality, Gram Sabha dates etc. as no records were maintained by the beneficiaries in these regard.

12.2.3 Because of the reasons cited above, the study team obtained data regarding date of supply of batch-wise birds, night shelter etc. from the Department of AH & VS. Date of Gram Sabha was not made available to the Study Team even in cases where the Department officials claimed that the selection of beneficiaries was through Gram Sabha.

12.2.4 Further, the comparison between the performance of the birds given to the scheme beneficiaries with the standards claimed and detailed in the leaf let published by UAS, Hebbal, Bengaluru was rather difficult as the scheme beneficiaries were not expected to maintain any records as being done under controlled conditions for research studies.

Notwithstanding the above, the team ensured that the responses received from the beneficiaries to the relevant questions were as realistic as possible and to some extent the responses were moderated with due diligence and care without adversely affecting the aim of the study.

Chapter 13

Reflection and conclusions

13.1. The evaluation team found few deviations in respect of selection of beneficiaries. As per the project design, selection should have been invariably through gram sabha., however out of nine taluks, selection through gram sabha was only in four taluks. Deviation was also observed in selection of beneficiaries.

13.2. As per the scheme guidelines, beneficiaries should have been BPL card holders. Out of the total sample of beneficiaries (247) covered under the study 3 beneficiaries (<1%) 2 from Bengaluru north Taluk and 1 from Shivamogga Taluk were found to be not belonging to BPL categories. It was observed that the BPL beneficiaries from Taluks bordering Bengaluru were found to be affluent and this defeats the very purpose of the scheme viz. provision of subsidiary income and nutrition to the family. For example, the beneficiaries (nine interviewed by the study team) from Doddipalya village in Agara Gram Panchayat of Bengaluru South Taluk (Bengaluru Urban District) were found to be from well-to-do families who owned spacious cement concrete houses, high end gadgets (plasma TV, refrigerator) and cars. These beneficiaries possessed BPL cards. As their economic status has changed, there is a need for revising the BPL list is recommended in such cases.

As per the checklist communicated by GOI letter dated 26th April 2014, the cluster areas/pockets were to be selected where there only the unorganized sector is present i.e. commercial, industrial or even SME is not present. It would have been prudent on the part of state Government to select less developed district for scheme implementation where unorganized sector is present i.e. not even SME is present. The cluster areas/pockets selected for scheme implementation do not appear to fulfill these criteria. In fact one of the districts viz, Bengaluru Rural has the highest contribution of 15.28% of total poultry population in the state. Besides, Bengaluru Rural district the other five districts covered under the scheme viz, Bengaluru Urban, Ramanagara, Tumakuru and Mandya as also Shivamogga appear to be better developed commercially/industrially as compared to some other districts.

It is envisaged under the scheme that basic training to farmers will be imparted. State Government should have organized training for farmers as also AH and VS staff. Overall no such specific effort was made by the state government. In fact each and every beneficiary interviewed expected that training should have arranged/organized. Necessity of training was expressed by most of the farmers as well as AH department staff. The study team also felt that no beneficiary should be given the birds unless and until he/she and his/her spouse or parents or all adults who live with him/her in the house/dwelling are trained in rearing Giriraja birds. This is because Giriraja requires a care and management system different than that of rearing country fowl. They should be trained in getting the Giriraja eggs hatched through other country hens, as Giriraja is not a good brooder.

The essential sub component of the scheme was to set up mother units which will raise the birds from day old stage to 46 weeks and have tie up arrangement with beneficiaries for supply of raised birds as per demand. Subsidy was recommended for release for 35 mother units (at 300 beneficiaries per mother unit). Each mother unit is expected to supply 13,500 birds i.e. 9 cycles with 1500 birds per cycle. There appeared to be not much progress in regard to setting up mother units and as such the state experienced shortage of birds with reference to demand. Sustainability of activity might have also affected adversely in absence of mother units for future availability of birds.

Each beneficiary to receive 45 birds. The birds were to be given in three batches/installments. The second and third installments were to be given after checking progress at 16th and 32nd week. The batch size for 1st, 2nd and 3rd batch was fixed at 20, 15 and 10 respectively. This was not done in most of the cases and very few received 45 birds in 3 batches. The stipulation of supply of 45 birds in 3 batches was observed to some extent only in 2 Taluks viz. Ramanagara and Tiptur. In the entire sample of beneficiaries only 36 were received 45 birds. In Maddur Taluk out of 34, 26 beneficiaries were given 45 birds in 2 batches only. In Tiptur Taluk out of 10 beneficiaries 8 were given 45 birds while in Ramanagara 10 were given 45 birds.

A provision of Rs 750 per family was available/made for cages/shelter, feeders/Wateres etc. for 20 birds. The state government to utilize the provision suitably particularly for night shelter. This provision was utilized only in Mandya, Tumakuru (Tiptur and Madhugiri Taluks) and Ramanagara districts and that too mostly for supply of feeders, and drinkers (ignoring night shelter component). The provision was just sufficient for one drinker and one feeder.

It was felt by the study team that since a totally free distribution of birds is unlikely to bring in a sense of ownership in the beneficiaries, and because most of the beneficiaries opined in the evaluation as willing to contribute 20 to 25 percent of the cost of birds and rearing accessories, the scheme may be contemplated to include the provision that beneficiaries will pay the 25% of the total cost of birds and accessories when they receive the first batch of birds. Women and differently abled beneficiaries can be made exempt from this.

Each and every intervention planned under the project has some positive influence on the beneficiaries and their mindset has changed along with their aspirations.

To bring about more positive outcomes, the study team felt that the scheme may be implemented under entrepreneurship mode with subsidy/grant component not exceeding 75%. However, in case of women and Physically Handicapped (PH)/differently abled beneficiaries, the subsidy/grant component may be up to 100%. Incidentally, under a socio-economic programme viz. “Karnataka Mahila Abhivridhi Yojane” one of the schemes identified by GOK for women has been supplied/distribution of raised Giriraja birds (minimum of five birds) of 8 weeks of age to all categories of rural women at 100% subsidy. (The rate of the bird is to be fixed by the DAH&VS on “no loss and no profit” basis). The scheme can harness the commercial potential available in the backyard poultry sector through establishment of separate small scale, self-sustainable poultry production enterprises by rural poor.

The improved fowls like Giriraja, CARI GOLD, Gramapriya are prone for predation. This is one of the draw backs of the synthetic birds which have been developed for backyard poultry. To tackle this, a good number of breeds like Krishna J, CARI NIRBEEK, CARI SHYAMA, UPCARI, HITCARI, RAJASRI etc. have been developed with a view to incorporating all desirable traits of native chicken breeds in the new genotype. These efforts of breeders from public and private sectors need to be supported by popularizing these birds under back yard poultry through development of location specific package of practices.

Chapter 14

Recommendations

14.1 The scheme is recommended to be continued and extended to all districts of Karnataka (except may be the coastal and wet Malnad regions where Giriraja may find it difficult to prosper) but with the changes and precautions that are contained in the recommendations later.

14.2. The selection of beneficiaries under the scheme should be done strictly in accordance with the eligibility criteria and procedures prescribed. No beneficiary should be selected until he/she has:

- a. His/her name in the beneficiary list prepared by the Gram Sabha
- b. A valid BPL Card
- c. A house/dwelling with sufficient space to safely house and rear Giriraja birds and a space good and sufficient for the birds to scavenge

Further, there should be a written transparent, fair and judicious criteria/process of inclusion and exclusion of beneficiaries which should be followed. A suggested criteria/process of inclusion and exclusion are furnished in **Annexure H**.

14.3. No beneficiary should be given the birds unless and until he/she and his/her spouse or parents or all adults who live with him/her in the house/dwelling are trained in rearing Giriraja birds. This is because Giriraja requires a care and management system different than that of rearing country fowl. They should be trained in getting the Giriraja eggs hatched through other country hens, as Giriraja is not a good brooder.

14.4. No beneficiary should be given the birds unless and until he/she has the night shelter and feeders and other equipment installed in his/her house/dwelling. This is to ensure that mortality of Giriraja is reduced, particularly against nocturnal predation.

14.5. Immediately at the time the first batch of birds is given, an inspection schedule of officers of the AH & VS department designated for the inspection/facilitation of each beneficiary should be drawn and intimated to the beneficiary as well as the Inspection/Facilitation officer and his/her immediate superior. It will be better, if the designated Inspection/Facilitation Officer and the beneficiary are made to meet in the training session. In case the inspection does not happen within three days of the decided and intimated date, the beneficiary should alert the immediate superior of the designated Inspection/Facilitation officer. Also, the immediate superior of the designated Inspection/Facilitation officer should verify and confirm if the inspection has indeed been done.

14.6 Since Giriraja is not a good brooder and requires country hens to be tricked into getting its eggs hatched, giving the beneficiaries a mix of Giriraja and country hens (with rooster) may be contemplated.

14.7. Sexed birds may be supplied under this scheme depending on the beneficiaries' preference for rearing the birds for meat or egg production.

14.8. Since a totally free distribution of birds is unlikely to bring in a sense of ownership in the beneficiaries, and because most of the beneficiaries opined in the evaluation as willing to contribute 20 to 25 percent of the cost of birds and rearing accessories, the scheme may be contemplated to include the provision that beneficiaries will pay the 25% of the total cost of birds and accessories when they receive the first batch of birds. Women and differently abled beneficiaries can be made exempt from this.

14.9. It is recommended that AH&VS department may examine the three cases of selection of ineligible beneficiaries which are detailed and reported in this evaluation report. The AH&VS department may inquire into similar cases in the case of population that did not fall in the sample of this study and take necessary action.

14.10 It is recommended that an inquiry may be done by the AH&VS department in all cases reported in the evaluation report where there has been 100% mortality of the Giriraja birds supplied. The AH&VS department may inquire into similar cases in the case of population that did not fall in the sample of this study and take similar action.

Chapter 15

Overall Impact of the Project

15.1. The major project objectives viz. livelihood stability and nutritional security has been achieved upto certain extent. The major grey area being lack of awareness amongst the scheme beneficiaries about the management practices of the Giriraja fowl and less awareness amongst DAH&VS staff about the scheme guidelines.

15.2. The project led to better nutrition and livelihood support to the beneficiaries when compared to control group.

15.3. Due to the scheme, the beneficiaries understood the advantages of rearing backyard poultry and also gained knowledge about the management of backyard poultry birds.

15.4. This further led to wellbeing of beneficiaries' families in terms of economic status, health and nutrition.

15.5. The beneficiaries realized the entrepreneurial potential of the activity and many expressed their readiness to rear more batches

15.6. The beneficiaries could acquire quality assets (Giriraja fowl) of their own and were able to undertake proper care of the birds.

15.7. The beneficiaries, although could not realize full benefit due to various problems viz. mortality amongst birds, lack of trainings, inadequate inputs, however realized the importance of rearing birds. They developed confidence about maintaining the assets in good productive state and improve their economics through better health, nutritional support, etc. The beneficiaries are convinced about theoretical usefulness of all these aspects, i.e proper feeding of birds, better management, providing nigh shelter for security of birds, maintaining cleanliness, etc.

15.8. There was general improvement in economic status as reflected through increased annual income, increased meat / eggs consumption, etc.

15.9 The various intervention under the project resulted into success of the actions taken by beneficiaries in view of backward and forward linkages made available to them by the implementing agencies.

15.10. Most of the scheme beneficiaries expressed their willingness to contribute in case more number of birds are provided to them.

15.11 The scheme can harness the commercial potential available in the backyard poultry sector through establishment of separate small scale, self-sustainable poultry production enterprises by rural poor.

Annexure A

Sanctioned Terms of reference (TOR) of the study

- 1 Has the selection of beneficiaries under the scheme been perfect and in accordance with the procedure prescribed? Have there been cases wherein a beneficiary selected was not living Below Poverty Line (BPL)?
- 2 What has been the average time lapse from the date of Gram Sabha in which the beneficiary is selected and –
 - a. The date on which the first batch of 20 Giriraja chicks (if the first batch was less than 20 then date on which 20th chick are received may be taken into account) was received,
 - b. The second and third batches of 15 and 10 chicks was received, and,
 - c. The date on which the bio secure night shelter for chicks was given.
- 3 What is the system of follow up by the department on the health and life of the birds given? If there is no system in place, what should be the system of follow up?
- 4 Have the Giriraja chicks and fully mature birds lived up to the standards claimed and detailed in a Table before? If not, what have been the deviations and to what extent?
- 5 In case the chick or bird perished before the most productive span of 73 weeks of age (i.e. 69 weeks after being given to the beneficiary), what have been the causes of it? What methods can be recommended to prevent these (particularly if they fall in the category of unnatural death)?
- 6 Have the nutritional and financial status of the beneficiary and his/her family improved because of this scheme?
- 7 Whether the scheme has motivated other people in the neighborhood to take up backyard poultry farming? (Please elucidate the reasons for it too)
- 8 Whether the scheme has resulted in other backyard poultry farmers in going in for Giriraja bird and giving up country fowl farming? (Please mention the reasons for the outcome too).
- 9 Have beneficiaries used at least a part of the progeny of the birds given to them to continue the poultry farming activity that commenced with the giving of Giriraja

chicks to them? In how many cases (percentage wise) has this happened? What have been the reasons for the beneficiaries not doing so or attempting and failing in doing so?

- 10 What qualities, good and bad both, are expressed about the Giriraja fowl by the beneficiaries, other than those already known or evaluated as above?
- 11 The performance of the scheme has been less than the target since its inception in 2011. Are there any other reasons for this besides shortage of Giriraja chicks?
- 12 What are the changes that may be recommended for the scheme so as to make it better?
- 13 Whether the Government should be investing in schemes like these in which very little is done in a very spread out way making no or minimal impact?
- 14 The Consultant Evaluation Organization insight may be taken on whether such support can be taken up on entrepreneur mode with marketing linkages?

Annexure B

Survey Tools and Questionnaires

PARTA Interview Schedule for scheme beneficiaries

Data Sheet No.	Date of visit	Sample Year of supply of fowls to the beneficiary (Pl. tick)		
		2012-13	2013-14	2014-15

District	Taluk	Gram Panchayat	Village

1. BENEFICIARY DETAILS / BASIC INFORMATION

1.1 Name: Mr. /Ms. _____ Mobile no: _____

1.2 Full Postal Address:

1.3 Physical Infrastructure available/ area of backyard space

Availability of Backyard Space	a. Yes <input type="checkbox"/> b. <input type="checkbox"/>
If available , approximate area in Sq.ft.
If not available , where the birds are housed?

1.4 Financial Status: Means of Livelihood _____; If **Agriculture**, whether

Small Farmer

Marginal Farmer

 Landless labo

Proof for BPL (Pl. tick)	
Category	BPL <input type="checkbox"/>
	Non BPL <input type="checkbox"/>
Identification (mention the BPL list number) > *If (b.) pl specify the issuing authority @If (d.) pl specify	a.BPL Ration Card <input type="checkbox"/>
	b.Income Certificate* <input type="checkbox"/>
	c. None <input type="checkbox"/>
	d. Any other proof@ (Pl specify).....

2. AWARENESS/ PERCEPTION ABOUT THE SCHEME:

Source of knowledge (pl. tick the appropriate box)			
Print media	Electronic media	Extension agencies	Word of mouth
Village Meetings	Gram Panchayat	Elected Representative	Seminar/Workshop

3. SELECTION PROCEDURE

Awareness about the selection procedure	
<p>Were you aware of the selection procedure?</p>	<p>a. Aware <input type="checkbox"/></p> <p>If aware, pl mention the selection procedure</p> <p>1.</p> <p>2.</p> <p>b. Not aware <input type="checkbox"/></p>
<p>Did you approach anyone for inclusion in the scheme?</p>	<p>a. Yes <input type="checkbox"/></p> <p style="text-align: right;">If</p> <p>yes, pl mention the name & position held by the person approached/contacted.</p> <p>.....</p> <p>b. No <input type="checkbox"/></p>
<p>Have you incurred any cost for inclusion in the scheme?</p>	<p>a. Yes <input type="checkbox"/> b. No <input type="checkbox"/></p> <p>If yes, mention the amount incurred</p>

4. SCHEME IMPLEMENTATION

4.1 Training

Training of Beneficiary				
Training received regarding activity		a. Yes <input type="checkbox"/>		b. <input type="checkbox"/>
If yes, Pl mention >	Venue	Duration (days)	Date of training	Agency
If no, how you learnt about the management aspects of Giriraja fowl rearing?		1.		
		2.		
		3.		

4.2 Presence of birds on the day of the visit

Males (Nos.)	Age (in weeks)	Females	Age (in weeks)	Total Birds	Remarks, regarding non existence of birds.

4.3 Supply of scheme inputs by the department

BioSecure night shelter	BATCH I (Total birds20)	BATCH II (15)	BATCH III (10)	Total birds

Date	No.	Date	Actual no. of Birds supplied	20 th Bird supplied on	Date	Actual no. of Birds supplied	Date	Actual no. of Birds supplied	Received as against stipulated 45 nos.

4.4. Details of Chick supply

Breed – Giriraja	a. Straight run <input type="text"/>		b. Sex <input type="text"/>				
Age at the time of supply	Batch>	I		II		III	
	Age (weeks)	M	F	M	F	M	F

4.5 Aftercare measures taken by beneficiary with regard to Breeding (Hatching of eggs), Vaccines/ Drugs/other health aspects, Supplementary feed, Water, weather management, protection etc.

	Followed	Not followed
Whether followed (Pl. tick)		
If followed, in what aspects/areas	1. 2. 3.	

4.6 Beneficiary's perception on the Input supply under the scheme

Are you satisfied with the input supply under the scheme? (Birds/Bio shelter/ after care services)	a. Yes <input type="checkbox"/> b. No <input type="checkbox"/>
If No, what are the suggested measures? (What are your further expectations regarding the quality of input supply)	1. 2. 3.

5. FOLLOW UP AND MONITORING BY AH DEPARTMENT

5.1 Frequency of visits (Pl. tick)					
Frequency of visits by AH officials. Interval>	Monthly	Quarterly	Half yearly	Annual	Others
Designations of the Officials visited	1. 2. 3.				

5.2 Areas of advice received from AH Department.		
Area of advice	Whether received	
	Yes	No
(a) Breeding (Hatching of eggs)		

(b) Health		
(c) Feeding		
(d) Vaccination/Medication * if Yes, pl specify	*	
(e) Management		
(f) Record keeping		
(g) Marketing		
(h) Others, if any		

5.3 Any feedback taken by AH department * If Yes, pl specify	a. Yes <input type="checkbox"/> <input type="checkbox"/>
--	---

6. PERFORMANCE OF THE FOWL UNDER SCAVENGING/ VILLAGE CONDITIONS

6.1 Average body weight	Weight in Kg.
@ 8 th Weeks of age	
Pullets (16 Weeks)	
Adult Male (2024 weeks)	
Adult Female (2024 weeks)	

Spent Hens	
------------	--

6.2 Egg Production	Age at 1 st egg (in weeks)	
	Avg. Weight of the eggs (in gm)	
	Annual egg production/bird (Nos.)	

6.3 Age at culling	Age in weeks
Male	
Layers	
Spent Hens	

6.3.1 Reasons for early culling, if any	1. 2.
---	--------------

6.4 Mortality							
Batch I (___/20 birds)		Batch II (___/15 birds)		Batch III (___/10 birds)		Overall(___/45 birds)	
Deaths	%	Deaths	%	Deaths	%	Deaths	%

Average life span of the birds (in weeks)	
Causes for mortality before reaching the productive span of 73 weeks (i.e 69 weeks after receiving the birds)	Diseases	1. 2.
	Accident	
	Predators	
	Other causes	1. 2.

6.5 Beneficiary's perception about the qualities of Giriraja fowl such as sturdiness, Resistance to diseases, acclimatization, selfprotection ability, premium price for egg/meat, sluggishness etc.	
Pl. mention the Good Qualities	1. 2. 3. 4. 5.
Pl mention the Bad Qualities, (with reference to scavenging/village conditions)	1. 2. 3. 4.

7. BENEFITS RECEIVED FROM THE SCHEME PER FAMILY PER ANNUM

7.1 Physical Terms

Type of benefit	Eggs (Nos) Consumed	Meat (Kg) Consumed	Health benefits	Medical expenses (Pl tick)	Food item Expenses	Others
Physical terms			1	Increase <input type="checkbox"/>	Increase <input type="checkbox"/>	
			2	Decrease <input type="checkbox"/>	Decrease <input type="checkbox"/>	
				Savings/Yr	Savings/Yr	
Opportunity cost (Rs)						

7.2 Financial terms (sale of eggs, meat and manure per annum from a unit of birds)

7.2.1 Egg production visàvis income from market eggs

Egg production & income from eggs sold	
Total eggs laid/year (nos.)	(A)
Total eggs consumed/year (nos.)	(B)
Total eggs sold/year (nos.)	(A)(B)
Avg. sale price/egg (Rs.)	

7.2.2 Batch wise no of birds sold vis-à-vis income from sale.

Category	Hens Batch I	Hens Batch II	Hens Batch III	Total birds	Body weight/ bird (Kg)	Total weight (Kg)	Unit rate Rs./ Kg	Total income (Rs)
Pullets								
Layers								
Spent Hens								
Male								
Total								

7.2.3 Total income for the unit from sale of eggs, meat, manure, etc. (unit sizebirds)

Eggs (Rs.)	Meat (Rs.)	Manure (Rs.)	Others (Rs.)	Total(Rs.)

7.3 Overall benefits perceived

Whether the scheme was beneficial to you?	a. Yes <input type="checkbox"/>	b. No <input type="checkbox"/>
If Yes, Whether nutritional & financial status of the family improved?	a. Yes <input type="checkbox"/>	b. No <input type="checkbox"/>

Whether premium/better market prices are received for Giriraja birds?	Eggs		Meat	
	Yes	No	Yes	No
If Yes, how much?	Eggs (Rs./egg)		Meat (Rs./Kg)	
Are you continuing, rearing of Giriraja birds on your own?	a. Yes <input type="text"/>		b. No <input type="text"/>	
If No, reasons for discontinuation	1. 2. 3.			
If Yes, Present unit size (nos.)	a. Ma <input type="text"/>		b. Fe <input type="text"/>	
Mode of procurement of Day Old Chicks(DOCs)	1. Broody hen/custom hatching of own egg <input type="text"/>			
	2. From open market <input type="text"/>			
Reasons for procuring DOCs other than captive source	1. 2.			
Where from DOCs of Giriraja fowls are procured?	1. Source/Place 2. Distance (km)			

8. Willingness to contribute to avail further benefits from the scheme

Are you willing to contribute a portion of the input cost, if the scheme is reintroduced?	a. Yes <input type="checkbox"/> b. No <input type="checkbox"/>
If No, what are the reasons	1. 2.
If Yes, up to what extent (in %) contribution can be made?% or amount in Rs.

9. Capacity expansion

9.1 Are you willing to expand the capacity? If so, what are the difficulties/ constraints and how these can be managed?

9.2 What further support you need for establishing sustainable poultry unit?

10. DEMONSTRATION/ RADIATORY EFFECTS

Have you recommended the venture to your neighbours?	a. Yes <input type="checkbox"/> b. No <input type="checkbox"/>
If No, what are the reasons?	1. 2.
If Yes, what are the reasons?	1. 2.

Whether your neighbour has taken up Backyard Poultry farming after your enrolment under the scheme?	a. Yes <input type="checkbox"/> b. No <input type="checkbox"/> c. Not aware <input type="checkbox"/>
Whether other Backyard Poultry farmers going in for Giriraja fowl after your enrolment under the scheme?	a. Yes <input type="checkbox"/> b. No <input type="checkbox"/> c. Not aware <input type="checkbox"/>

11. OVERALL EXPERIENCE/ FEED BACK/ OPINION OF THE BENIFICIARY

11.1 Suggested changes for better implementation of the scheme

1. _____
2. _____
3. _____

11.2 Additional expectations from state government department with particular reference to types of bird to be supplied by the department.

1. _____
2. _____
3. _____

12. Marketing

Whether you face any problem in marketing of Birds/eggs/Spent hens etc.	a. Yes <input type="checkbox"/> b. No <input type="checkbox"/> If Yes, list out the problems & suggestions, if any 1. _____ 2. _____ 3. _____
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PART B Interview Schedule for neighbour of the scheme beneficiaries

Data Sheet No.	Date of visit	Sample Year of supply of fowls to the beneficiary (Pl. tick)		
		2012-13	2013-14	2014-15

District	Taluk	Gram Panchayat	Village

1. NEIGHBOUR DETAILS / BASIC INFORMATION

1.1 Name: Mr. /Ms. _____ ; Neighbour of _____
 (scheme beneficiary name)

Mobile no: _____

1.2 Address:

Are you taking up Backyard poultry after seeing the success of your neighbour?	a. Yes <input type="checkbox"/>	b. No <input type="checkbox"/>
If No, what are the reasons?	1. 2.	
If Yes, what are the reasons?	1. 2.	

PART C Interview Schedule for other RBY Poultry farmer

Data Sheet No.	Date of visit	Sample Year of supply of fowls to the beneficiary (Pl. tick)		
		2012-13	2013-14	2014-15

District	Taluk	Gram Panchayat	Village

1. RBY POULTRY FARMER DETAILS / BASIC INFORMATION

1.1 Name: Mr. /Ms. _____ ; Neighbour of _____

(scheme beneficiary name)

Mobile no: _____

1.2 Address:

Which breed of fowl you are taking up under Rural Backyard Poultry.	1. 2.
Are you taking up Giriraja fowl rearing after seeing the success of your neighbor/ beneficiary villager?	a. Yes <input type="checkbox"/> b. No <input type="checkbox"/>
If No, what are the reasons?	1.

	2.
If Yes, what are the reasons?	1. 2.
If Yes, how is the performance of Giriraja fowl when compared to the breed you were rearing earlier??	1. 2.
If Yes, what is the incremental income derived from rearing Giriraja fowl visàvis earlier breed?	
If Yes, will you be taking up Giriraja fowl rearing during next year also?	a. Yes <input type="checkbox"/> b. No <input type="checkbox"/> Reasons : 1. 2.

PARTD Interview Schedule for Animal Husbandry department Officials

Data Sheet No.	Dist. & Taluk name	Date of visit	Sample Year of supply of fowls to the beneficiary (Pl. tick)		
			2012-13	2013-14	2014-15

Name of the Official	
Designation & address	
Contact number	

Yearwise and villagewise no. of applications received and no. of beneficiaries supplied with chicks as per Department records.

2012-13			2013-14			2014-15		
Village	No. of applications recd.	No. of beneficiaries supported	Village	No. of applications recd.	No. of beneficiaries supported	Village	No. of applications recd.	No. of beneficiaries supported

As per department records

1. Scheme Implementation and Supply of scheme inputs to the beneficiaries

1.1 Publicity/Propaganda measures and Selection/ Identification of beneficiary

<p>Procedure followed for</p> <p>a. Publicity & Propaganda measures</p>	<p>1. Gram Sabha</p> <p>2. Advt. in news paper/posters</p> <p>3. Others</p>	<p><input type="text"/></p> <p><input type="text"/></p> <p><input type="text"/></p>
<p>b. Identification of beneficiaries for inclusion under the scheme?</p>	<p>1. Gram Sabha</p> <p>2. Lottery</p> <p>3. Others</p>	<p><input type="text"/></p> <p><input type="text"/></p>
<p>c. Documentary Proof taken by the department to ascertain that the beneficiary falls under BPL category.</p>	<p>1. BPL card</p> <p>2. Income certificate</p> <p>3. Others</p>	<p><input type="text"/></p> <p><input type="text"/></p> <p><input type="text"/></p>

D. Date of Gramsabha meeting in which the beneficiaries recommended/identified for inclusion under the scheme.	
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1.2 Supply of scheme inputs (As per department records)

BioSecure night shelter		BATCH I (Total birds 20)			BATCH II (15)		BATCH III (10)		Total birds supplied as against stipulated 45 nos.
Date	No.	Date	Actual no. of Birds supplied	20 th Bird supplied on	Date	Actual no. of Birds supplied	Date	Actual no. of Birds supplied	

2. Scheme Implementation

2.1 Year wise targets and achievements (with reference to <u>no. of beneficiaries supported</u>)																								
A. Poultry Units																								
Year	2012-13						2013-14						2014-15						Total					
	A	B	C	D	E	Total	A	B	C	D	E	Total	A	B	C	D	E	Total	A	B	C	D	E	Total
Target (nos.)																								
Achievement																								

<p>Constraints, if any, faced during implementation of the scheme.</p>	<p>1.</p> <p>2.</p> <p>3.</p>
<p>Suggestions for betterment of the scheme</p>	<p>1.</p> <p>2.</p> <p>3.</p>
<p>Whether the scheme should continue in its present form or not?</p>	<p>a. Yes <input type="checkbox"/></p> <p>b. No <input type="checkbox"/></p> <p>Reasons : 1.</p> <p>2.</p>

Annexure C

List of persons with addresses personally interviewed

Sl .No	Name	Designation	Place	Contact No
1	Dr. Shiva Shankar Murthy	DD,AHVS	Bengaluru H.Q.	9845580803
2	Dr.K.H.Shivarudrappa	DD,AHVS	Bengaluru Rural	08023412189
3	Dr.Janardhan T.V.	AD,AHVS	Devanahalli, (Bengaluru Rural)	9845081187
4	Dr.Narayana Swamy	Vet Doctor	Devanahalli, (Bengaluru Rural)	9591444951
5	Dr.Aswak	AD,AHVS	Hoskote, (Bengaluru Rural)	9448310336
6	Dr.Prakash Reddy	DD,AHVS	Bengaluru Urban	08023418327
7	Dr.B.V.Ravi	AD,AHVS	Bengaluru North, (Bengaluru Urban)	9448085002
8	Dr.Allama Prabhu	Vet Doctor	Bettalatur/ Bengaluru North	9844075743
9	Dr.Kantharaj	Vet Doctor	Chikkajala/ Bengaluru North	9845290705
10	Dr.Amruthesh	Vet Doctor	Shivakote/ Bengaluru North	9449549093
11	Dr.Shashi Kumar	AD,AHVS	Bengaluru South, (Bengaluru Urban)	9448713042
12	Dr.K.V.Venugopal	AD,AHVS	Anekal, (Bengaluru Urban)	9845075817
13	Dr.Murali Krishna	VET Doctor	Anekal (Bengaluru Urban)	9902586895
14	Dr.Krishna Murthy	VET Doctor	Anekal (Bengaluru Urban)	-
15	Dr.L.Prakash	DD,AHVS	Mandya	08232220461
16	Dr.H.T.Jayaram	AD,AHVS	Maddur, (Mandya)	9448589895
17	Dr.M.B.Devaraj	DD,AHVS	Ramanagara	08027272055
18	Dr.Suresh	AD,AHVS	Ramanagar, (Ramanagara)	9481025750
19	Dr.Rajashekar	DD,AHVS	Tumakuru	9448718524/08 162278620
20	Dr.Siddalingappa	AD,AHVS	Tiptur, (Tumakuru)	9449201827/08 134250002
21	Dr.Devaraj	AD,AHVS	Madhugiri,(Tumakuru)	9448675833/08 137282310
22	Dr. T.M. Sadashiva	AD, AHVS	Shivamogga	9481612714

Annexure D

Places, date and number of sample beneficiaries interviewed

Sl.No.	Date of Visit	Village	Count of Name	Nieghbours	Other RBY rearers	
Bengaluru Rural						
Hoskote						
1	02.12.2015	Govindapura	1	0	0	
		Jadiganahalli	1	0	0	
		K.B. Hosahalli	1	0	0	
		Khaji Hosahalli	3	0	0	
		Kolathur	0	0	1	
		Hasigala	4	3	0	
	Devanahalli					
	04.12.2015	Papanahalli	14	3	1	
		Varadenahalli	3	3	0	
		C T Mangala	17	3	6	
	Bengaluru Rural Total			44	12	8
Bengaluru urban						
Bengaluru south						
2	03.12.2015	Anepalya	1	2	0	
		Doddipalya	9	1	0	
		Kamayyanapalya	1	0	0	
	Bengaluru NORTH					
	15.12.2015 & 18.12.2015	Bettahalasur	17	6	0	
		Chikkajala	5	5	0	
		Doddajala	20	0	0	
		Bynahalli	10	0	0	
		Maranayakanahalli	5	2	1	
		Shivakote	25	7	0	
	21.12.2015	Sonnappanahalli	4	0	0	
		Bidaraguppe	11	5	0	
	Bengaluru Urban Total			108	28	1
Mandya						
Maddur						
3	07.12.2015 &	Bidarakote	1	0	0	
		Bilekere	1	0	0	

Sl.No.	Date of Visit	Village	Count of Name	Nieghbours	Other RBY rearers
	08.12.15	DoddaarisinaKere	1	0	0
		K.Mallaiahnagar	3	0	0
		Kesthur	1	0	0
		Tubinakere	1	0	0
		Gattahalli	1	0	0
		Koudley	1	0	0
		Aruvanahalli	1	0	0
		Arethippur	8	5	3
		Kothipura	1	0	0
		Mallanakuppe	8	5	3
		Mallappakere	1	0	0
		Kudaramundi	1	0	0
		Haralakere	2	0	0
		Yadaganahalli	1	0	0
		Huligere	1	0	0
Mandya Total			35	10	6
Ramanagara					
Ramanagara					
4	10.12.2015	Bilagumba	3	0	0
		Kuruballi	1	0	0
		Palabavidoddi	2	0	0
		Achalu	1	0	0
		Hunasanahalli	4	2	1
		Medaradoddi	2	1	1
		KSBeedi, Ramnagar	1	0	0
		Agalahalli	1	0	0
		Channamanahalli	1	0	0
		Ramanagara Total			17
Shivamogga					
Shivamogga					
5	23.12.2015	Chikkamaradi	1	0	0
		Hasudi	1	0	1
		Hasudi Farm	1	1	0
	30.12.2015	Malalakoppa	1	2	0
		MandeOkoppa	1	0	0

Sl.No.	Date of Visit	Village	Count of Name	Nieghbours	Other RBY rearers	
	01.01.2016	Mattur	1	1	0	
		Hoyasa0halli	1	0	0	
		Javalli	1	0	0	
		Pillangere	2	0	0	
		Hanumanthapura	1	0	2	
		Puradal	2	0	1	
Tumakuru						
Tiptur						
6	09.12.2015	Biligere	1	1	0	
		Rajathadripura	1	0	0	
		Hunisegatta	4	0	0	
		Kattehalli	1	0	0	
		Kondligatta	3	2	1	
	Madhugiri					
	14.12.2015		Kasaba, Madhigiri	4	0	0
			Dodderi		1	0
			Gondihalli	1	0	1
			Sanjeevapura	2	0	0
			Siddanahalli	1	0	0
			Thimmalapura Thanda		3	3
			Thaggihalli	7	0	0
			Upparapalya	1	0	0
			Chambanahalli	2	0	0
			Basavanahalli	2	1	0
	Vaderahalli		1	0		
Tumakuru Total			30	9	5	
Grand Total (6 Districts)			247	66	28	

Annexure E

Compilation of Case Studies and Best Practices

Out of the 247 beneficiaries interviewed the some of the beneficiaries listed below have reported good financial benefits from the scheme. These are presented as case studies/best practices.

1. Shri. Annayyappa, Village Kondligatta, Taluk Tiptur and District Tumakuru



- a) Out of 40 birds received by him in two batches of 20 birds each at an interval of 3 weeks, there was 50% mortality.
- b) The entire output from the birds valued at Rs. 9,500(1000 eggs at Rs. 5 per egg and 30Kg meat at Rs. 150 per Kg) was used for family or home consumption.
- c) Presently the beneficiary has 6 Giriraja birds and wants to increase the number by introducing fresh Giriraja birds in near future(second and last batch was received by him about 95 weeks back from the date of visit to him).

2. Shri. Yoganand, village Kattehalli, Taluk Tiptur and District Tumakuru



- a) The beneficiary received 45 birds in three batches of 10, 15, and 20 birds, respectively (the interval between receipt of batches was six weeks and 5 weeks)
- b) The total income derived by him was Rs 37,850(2000 eggs at Rs 10 per egg and 119 Kg meat at Rs 150 per Kg). The entire meat production (119 Kg) and 50 % (1000) of eggs were used for family consumption.
- c) Presently he has six Giriraja birds and intends to expand the number by introducing fresh Giriraja birds in near future (the last batch was supplied about 91 weeks prior to date of visit of team).

3. Shri.Rangappa, Village Hunisegatta, Taluk Tiptur and District Tumakuru.



- a) Out of 45 birds received by beneficiary in three batches of 10, 15, and 20, respectively (the interval between supply of batches was 3 weeks and 5 weeks) 25 birds (55%) died While 33% (15) died due to predation ,22% (10 birds) died due to diseases.
- b) He earned an income of Rs 20,000 (Rs. 5000 from sale of 1000 eggs at Rs 5 per egg and 100 Kg of meat at Rs 150 per Kg). The entire egg production and 33% of meat production was used for family consumption.
- c) Presently he has 31 birds (1 bird from the scheme and 30 birds of his own hatched by him in captivity by using 50 eggs obtained from the hens received by him under the program) and intends to expand the number by introducing fresh Giriraja birds in the near future (the last batch was supplied 91 weeks prior to the date of visit of team).

4. Shri. Muniyappa, village Medardoddi, Taluk Ramanagara and district Ramanagara



- a) Out of 40 birds received by the beneficiary in three batches of 10, 10, and 20 respectively (the interval between supply being 5 and 47 weeks), 7 birds (18%) died. the last batch was supplied 77 weeks prior to the date of visit.
- b) His earnings were Rs 4950 in the form of meat from 11 birds (Total 33 Kg valued at Rs 150 per Kg), which he used entirely for home consumption.
- c) Presently he has 18 Giriraja birds and planning to increase the number by captive production of chicks obtained from the fertile eggs produced by these birds (the last batch was supplied 77 weeks prior to the date of visit).

5. Shri. Kariyappa, village Medardoddi, Taluk Ramanagara and district Ramanagara.



In the photograph family member of the beneficiary is seen

- a) Out of 45 birds received by the beneficiary in three batches of 10, 10 and 25 respectively (the interval between supply being 5 and 47 weeks), 9 birds (20%) died.
- b) The entire output i.e. 400 eggs and 60 Kg of meat was used for home consumption, the opportunity cost of which works out to around Rs 11,000 (400 eggs at Rs 5 per egg and 60 Kg of meat at Rs 150 per Kg).
- c) Presently he has 16 birds and intends to increase the number by hatching the fertile eggs obtained from the existing stock of hens (the last batch was supplied 77 weeks prior to the date of visit).

6. Smt.Susheelamma, village Channammanahalli, Taluk Ramanagara and district Ramanagara.



In the photograph family member of the beneficiary is seen

- a) Out of 45 birds received by the beneficiary in three batches of 10, 20, and 15 respectively (the interval between supply being 10 and 71 weeks), 25 birds (55%) died.
- b) The entire production of 600 eggs and 45 Kg of meat was used by her for family consumption, the opportunity cost of which worked out Rs 9750 (600 eggs at Rs 5 per egg and 45 Kg of meat at Rs 150 per Kg).

Presently she has 5 Giriraja birds and intends to increase the number by captively hatching the fertile eggs obtained from the existing stock of hens(the last batch was supplied 77 weeks prior to the date of visit).

7. Shri.Ramesh, village Bilagumba, Taluk Ramanagara and district Ramanagara



In the photograph family member of the beneficiary is seen

- a) Out of the 45 birds received by the beneficiary in three batches of 10, 10 and 25 respectively (the interval between supply being 5 and 47 weeks), all the 10 birds from first batch died, whereas there was zero/nil mortality in case of 2nd and 3rd batch.
- b) The entire output of 30 Kg of meat was used by him for family consumption. The opportunity cost of which worked out to Rs 4500 (30 Kg meat at Rs 150 per Kg).
- c) Presently he has 19 Giriraja (the last batch was supplied 77 weeks prior to the date of visit).

8. Shri. Aravind, village Mallanakoppa, Taluk Maddur and district Mandya.



- a) Out of the 45 birds received in two batches of 30 and 15 respectively (the interval between supply/receipt being 31 weeks), 4 birds(9%) died.
- b) His total income was Rs. 44,500 (2500 eggs at 10 per egg and 130 Kg of meat at Rs. 150 per Kg). Out of the total income, around 40% (i.e. 1000 eggs and 50 Kg meat) was used for home/family consumption.
- c) Presently he has only one bird and intends to increase the number (the last batch was supplied 26 weeks prior to the date of visit to him).

Annexure F

Details of major deviations, Non conformities, digression of programme

Sl.no	Programme guidelines	Set up required	Deviations/non conformities	Remarks/ Reference
1	Selection of beneficiaries	Selection through gram Sabha	Out of 9 Taluks selection through Gram Sabha was only in 4 Taluks.	Dates of Gram Sabha were not available.
2.	In terms of said GOI letter, the scheme will have beneficiary farmer's families belonging to BPL categories.	The AH department expected to verify BPL card, obtained copies and note the card numbers.	Out of the total sample of beneficiaries (247) covered under the study 3 beneficiaries (<1%) 2 from Bengaluru north Taluk and 1 from Shivamogga Taluk were found to be not belonging to BPL categories.	Shanthamma Krishna Murthy, Prashanth (Benbgaluru North) and Ms. Rathnamma (Shivamogga).
3.	As per the checklist enclosed to said GOI letter the cluster areas/pockets were to be selected where there only the unorganized sector is present i.e. commercial, industrial or even SME is not present.	It would have been prudent on the part of state Government to select less developed district for scheme implementation where unorganized sector is present i.e. not even SME is present.	The cluster areas/pockets selected for scheme implementation do not appear to fulfill these criteria. In fact one of the districts viz, Bengaluru Rural has the highest contribution of 15.28% of total poultry population in the state. Besides, Bengaluru Rural district the other five districts covered under the scheme viz, Bengaluru Urban, Ramanagara, Tumakuru and Mandya as also Shivamogga appear to be better developed commercially/industrially as compared to some other districts.	Less developed districts like could have been considered.
4.	It is envisaged under the scheme that basic training to farmers will be imparted.	State Government should have organized training for farmers as also AH and VS staff	Overall no such specific effort was made by the state government. In fact each and every beneficiary interviewed expected that training should have arranged/organized.	Most of the farmers as well as AH department staff wanted training.
5.	The essential sub component of the scheme was to set up mother units which will raise the birds	Subsidy was recommended for release for 35 mother units (at 300	There appeared to be not much progress in regard to setting up mother units and as such the state experienced shortage of	As per GOI letter No. 438/2011LDI(P) dated 04.07.2011

Sl.no	Programme guidelines	Set up required	Deviations/non conformities	Remarks/ Reference
	from day old stage to 46 weeks and have tie up arrangement with beneficiaries for supply of raised birds as per demand.	beneficiaries per mother unit). Each mother unit is expected to supply 13,500 birds i.e. 9 cycles with 1500 birds per cycle.	birds with reference to demand. Sustainability of activity might have also affected adversely in absence of mother units for future availability of birds.	
6(a)	Each beneficiary to receive 45 birds The birds were to be given in three batches/installments.	The second and third installments were to be given after checking progress at 16 th and 32 nd week. The batch size for 1 st , 2 nd and 3 rd batch was fixed at 20, 15 and 10 respectively.	This was not done in most of the cases and very few received 45 birds in 3 batches. The stipulation of supply of 45 birds in 3 batches was observed to some extent only in 2 Taluks viz. Ramanagara and Tiptur . In the entire sample of beneficiaries only 36 were received 45 birds. In Maddur Taluk out of 34, 26 beneficiaries were given 45 birds in 2 batches only.	In Tiptur Taluk out of 10 beneficiaries 8 were given 45 birds while in Ramanagara 10 were given 45 birds.
b	Each beneficiary to receive 20 birds as first batch.	Adequate no. of birds to be made available.	The first batch of 20 or more birds was given to 30 families (12%) out of 247 families.	Four families from Tiptur and 26 from Maddur.
c.	The 2 nd and 3 rd installment was to be given after checking progress at 16 th and 32 nd week.	Proper follow-up to be done by the Department.	This was not followed. The progress of earlier batches was not checked. The second and 3 rd batches were supplied without reference to what happened to earlier batches.	Annexure II (B) of GoI letter Ref. No. 43-23/2009-LDT(P) dated 26.04.2011
d.	The batch size of 1 st , 2 nd and 3 rd batch was fixed at 20, 15 and 10 respectively	Supply of adequate birds/batch to be ensured by the department.	This stipulation was followed only in case of two beneficiaries from Tiptur Taluk of Tumakuru district. Sri. Manjunath Kariyappa from Biligere village and Govindappa Giriappa from village Kondligatta (Kuppalu Gram	Item No. 2 of ToR of the Study.

Sl.no	Programme guidelines	Set up required	Deviations/non conformities	Remarks/ Reference
			panchayat) were given 45 birds in 3 batches of 20, 15, and 10 each respectively	
e.	A provision of Rs 750 per family was available/made for cages/shelter, feeders/Wateres etc. for 20 birds.	The state government to utilize the provision suitably particularly for night shelter.	This provision was utilized only in Mandya, Tumakuru(Tiptur and Madhugiri Taluks) and Ramanagara districts and that too mostly for supply of feeders, and drinkers(ignoring night shelter component)	The provision was just sufficient for one drinker and one feeder.
f.	Supply of other inputs to precede supply of birds.	Logically to be supplied along with I batch.	This was observed in case of 13(5%) families from 2 Taluks (7 & 6).	Ramanagara and Shivamogga.
g.	Birds to be supplied at beneficiaries' doorstep.	Proper transport arrangement.	Birds not supplied at farmers' doorstep in Maddur Taluk.	High transport mortality due to stress.
h.	Birds to be sourced from Govt. farms.	Govt has six hatcheries.	In Madhugiri birds were sourced privately.	Birds from private party.

Annexure G

Scanned extract of the Interview schedule for AH Officials

Evaluation of Rural Backyard Poultry Farming in Karnataka



PART-D Interview Schedule for Animal Husbandry department Officials

Data Sheet No.	Dist. & Taluk name	Date of visit	Sample -Year of supply of fowls to the beneficiary (Pl. tick)		
MGR09	Tumkur Machigiri	14.12.2015	2012-13	2013-14	2014-15

Name of the Official	-Dr. Devaraju. T.A-
Designation & address	Assistant Director, Veterinary Hospital Machigiri, Tumkur Dist 572132
Contact number	Off 08187-282310 Mob: 9648675833

Procedure followed for a. Publicity & Propaganda measures By advertising by diff vet institutions by the officials who have selected the beneficiaries	1. Gram Sabha <input type="checkbox"/> 2. Advt. in news paper/posters <input type="checkbox"/> 3. Others <input checked="" type="checkbox"/>	
b. Identification of beneficiaries for inclusion under the scheme?	1. Gram Sabha <input type="checkbox"/> 2. Lottery <input type="checkbox"/> 3. Others <input type="checkbox"/>	Selection by the institutions Heads (Vet Officers)

2.3 Sourcing of inputs for the scheme	
What are the sources of procurement of chicks	1. Musaddh Ahmed. @ 3.50 Abid @ beer 2. Ballyu, Nagamangala Maniyal 465+750+585 3. District V.H. poultry centre Tumkur. 13654480 +1755
Constraints, if any in sourcing the chicks for the scheme	1. Better to supply from Govt Farms. 2. Low mortality in first batch :: farmer 3.
Suggestions for improving /augmenting the source of supply.	1. 2. Better to supply from Govt. farm 3.

2.5 Feedback regarding the scheme	
Whether the scheme motivated other people to take up backyard poultry	a. Yes <input checked="" type="checkbox"/> b. No <input type="checkbox"/> Reasons : 1. 2.

Waterers, Feeders & chix mesh for 100000 supplied by Manjunatha vet pharma Tumkur on 21/12/2014

Annexure H

Suggested beneficiary selection method and steps in selection

- 1 The selection of beneficiary may be as per the section 3A (3) (C) of Karnataka Panchayat Raj act, 1993.
- 2 The beneficiaries may be belonging to BPL category only. For this purpose the BPL card may be verified and the card number and date of issue of card may be recorded prominently.
- 3 The beneficiaries should be selected through Gram Sabha only.
- 4 The application form should invariably mention the date of Gram Sabha held in the respective village from where the beneficiary belongs.
- 5 There should be criteria for inclusion and exclusion of beneficiary. The criteria in this regard may be fixed on the basis of the following:
 - The village wise list of beneficiaries approved in all Gram Sabhas of the Taluk and district (as the case may be) to be obtained.
 - If the total no. of beneficiaries from the villages is more than that could be covered in a particular Taluk/district in the year, either consider the Gram Sabhas/villages beneficiaries list on first come - first serve basis. i.e. the Gram Sabha lists are accepted in the order of the date in which the Gram Sabha was held (first done first selected). Alternatively, the beneficiaries recommended by all Gram Sabhas can be included on pro rata basis.
 - While selecting the beneficiaries on pro rata basis, it may be ensured that the following category beneficiaries (in the order of preference) are included before considering general category beneficiaries:
 1. Physically Handicapped (PH), 2. Widow women/Destitute Women, 3. Women other than already selected in the preceding two categories, 4. Scheduled Caste (SC), and, 5. Scheduled Tribe (ST).
 - The beneficiaries which could not be covered in a particular year may be carried forward to next year. Until the list of beneficiaries of the previous is exhausted, no new list/ applications may be entertained.

Annexure I

Summary/Gist of findings giving answers to each question as per ToR

Sl.no.	Evaluation questions	Gist of findings	Para No.
1	Has the selection of beneficiaries under the scheme been perfect?	Yes, except in case of three beneficiaries	11.1.2
2	Average time lapse from the date of Gram Sabha in which beneficiary was selected	Dates of Gram Sabha were not available	11.2.7
3	What is the system of follow up by the department on the health and life of the birds given? If there is no system in place, what should be the system of follow up?	The system of follow up was found to be not quite effective. Suitable system suggested.	11.3.2 and Annexure H
4	Have the Giriraja chicks and fully mature birds lived up to the standards claimed and detailed in a Table before?	At the field level, the bird did not live up to the standards claimed.	11.4
5	In case the chick or bird perished before the most productive span of 73 weeks of age what have been the causes of it?	High mortality was observed. Suitable suggestions given.	11.5
6	Have the nutritional and financial status of the beneficiary and his/her family improved because of this scheme?	The nutritional and financial status of the beneficiary improved.	11.6
7	Whether the scheme has motivated other people in the neighborhood to take up backyard poultry farming?	Out of 66 neighbours interviewed only four showed motivation.	11.7.1
8	Whether the scheme has resulted in other backyard poultry farmers in	Out of the 26 famers interviewed 50%	11.8

Sl.no.	Evaluation questions	Gist of findings	Para No.
	going in for Giriraja bird and giving up country fowl farming?	have included Giriraja fowl in their flock.	
9	Have beneficiaries used at least a part of the progeny of the birds given to them to continue the poultry farming activity	Only 5% of the beneficiaries have used the eggs for hatching.	11.9
10	What qualities, good and bad both, are expressed about the Giriraja fowl by the beneficiaries, other than those already known or evaluated as above?	The beneficiaries were quite happy with the performance of Giriraja. However, the Giriraja bird was found to be more prone to predation and lacked disease resistance power as perceived by the beneficiaries.	11.10
11	The performance of the scheme has been less than the target since its inception in 2011. Are there any other reasons for this besides shortage of Giriraja chicks?	In absence of any other reason emanating from the evaluation study it appears that non availability of birds may be the only reason.	11.11
12	What are the changes that may be recommended for the scheme so as to make it better?	Certain suggestions have been given in the respective paragraphs and also	11.12

Sl.no.	Evaluation questions	Gist of findings	Para No.
		listed vide paragraph 5.12	
13	Whether the Government should be investing in schemes like these in which very little is done in a very spread out way making no or minimal impact?	Yes. Incidentally the Government has proposed to implement the scheme in all the districts except three. This is perhaps a step in right direction.	11.13
14	The Consultant Evaluation Organization insight may be taken on whether such support can be taken up on entrepreneur mode with marketing linkages?	The scheme can very well be implemented on entrepreneur mode. All the beneficiaries except one have shown willingness for margin contribution ranging from 20-50%.	11.14

Appendix 1A

Year wise, District wise and Taluk wise number of birds supplied.

District	Taluk	Total Families	Total Birds	Birds/Family	Total Villages	Birds/Village
2012-13						
Bengaluru Urban	Anekal	50	1000	20	1	1000
	Bengaluru north	436	8700	20	23	378
	Bengaluru south	880	10460	12	17	615
	Bengaluru East	257	5420	21	15	361
Bengaluru Urban Total		1623	25580	16	56	457
Ramanagara	Ramanagar	50	500	10	4	125
	Channapatna	30	300	10	4	75
	Magadi	30	300	10	4	75
	Kanakapura	10	100	10	4	25
Ramanagar Total		120	1200	10	16	75
Annual Total		1743	26780	15	72	372
2013-14						
Bengaluru Rural	Hoskote	202	3020	15	66	45
	Devanahalli	279	3120	11	19	164
	Doddaballapura	348	5222	15	14	373
	Nelamangala	245	2451	10	56	44
Bengaluru Rural Total		1074	13813	13	155	89
	Bengaluru South	138	2750	20	3	917
Bengaluru Urban Total		138	2750	20	3	917
Mandya	Maddur	11	335	30	12	28
	Mandya	11	1131	103	15	75
	Malavalli	11	125	11	7	18
	Srirangapatna	45	3224	72	7	461
	K.R.Pete	58	1570	27	35	45
	Pandavapura	11	880	80	4	220
	Nagamangala	64	3505	55	36	97
Mandya Total		211	10770	51	116	93
Ramanagara	Ramanagar	130	2344	18	15	156
	Channapatna	130	2100	16	13	162
	Magadi	170	2500	15	10	250
	Kanakapura	170	2700	16	18	150

District	Taluk	Total Families	Total Birds	Birds/Family	Total Villages	Birds/Village
Ramanagar Total		600	9644	16	56	172
Tumakuru	Tiptur	100	4500	45	58	78
	Sira	216	9720	45	68	143
	Tumakuru	132	5940	45	92	65
Tumakuru Total		448	20160	45	218	92
Shivamogga	Shivamogga	132	1335	10	94	14
	Shikaripura	128	3035	24	41	74
	Soraba	128	1560	12	104	15
	Hosanagara	128	2515	20	96	26
	Sagara	128	1530	12	76	20
	Bhadravathi	128	2900	23	48	60
	Teerthahalli	128	3395	27	18	189
Shivamogga Total		900	16270	18	477	34
Annual Total		3371	73407	22	1025	72
2014-15						
Bengaluru Rural	Hoskote	200	3000	15	87	34
	Devanahalli	340	5100	15	14	364
	Nelamangala	195	2921	15	48	61
Bengaluru Rural Total		735	11021	15	149	74
Bengaluru Urban	Anekal	243	5400	22	7	771
	Bengaluru north	840	10950	13	8	1369
	Bengaluru south	560	8843	16	5	1769
Bengaluru Urban Total		1643	25193	15	20	1260
Mandya	Maddur	239	7000	29	27	259
	Mandya	149	3909	26	35	112
	Malavalli	29	1000	34	13	77
	Srirangapatna	211	6153	29	11	559
	K.R.Pete	88	5000	57	50	100
	Pandavapura	53	2000	38	4	500
	Nagamangala	193	7000	36	58	121
Mandya Total		962	32062	33	198	162
Ramanagara	Ramanagara	100	1500	15	8	188
Ramanagara total		100	1500	15	8	188
Tumakuru	Madhugiri	120	1800	15	62	29
	Koratagere	57	855	15	52	16

District	Taluk	Total Families	Total Birds	Birds/Family	Total Villages	Birds/Village
Tumakuru Total		177	2655	15	114	23
Shivamogga	Shivamogga		1475	0		0
	Soraba		1789	0		0
	Sagara		1600	0		0
	Bhadravathi		1530	0		0
Shivamogga Total		0	6394	0	0	0
Annual Total		3617	78825	22	489	161

Appendix 1B

District wise and year wise summary (No. of Birds supplied)

Year	District	Total Families	Total Birds	Birds/Family	Total Villages	Birds/Village
2012-13	Bengaluru Urban	1623	25580	16	56	457
	Ramanagara	120	1200	10	16	75
	Annual total	1743	26780	15	72	372
2013-14	Bengaluru rural	1074	13813	13	155	89
	Bengaluru urban	138	2750	20	3	917
	Mandya	211	10770	51	116	93
	Ramanagara	600	9644	16	56	172
	Tumakuru	448	20160	45	218	92
	Shivamogga	900	16270	18	477	34
	Annual total	3371	73407	22	1025	72
2014-15	Bengaluru rural	735	11021	15	149	74
	Bengaluru urban	1643	25193	15	20	1260
	Mandya	962	32062	33	198	162
	Ramanagara	100	1500	15	8	188
	Tumakuru	177	2655	15	114	23
	Shivamogga	0	6394	0	0	0
	Annual total	3617	78825	20	489	148
2013-15	Bengaluru rural	1809	24834	14	304	82
2012-15	Bengaluru urban	3404	53523	16	79	678
2013-15	Mandya	1173	42832	37	314	136
2012-15	Ramanagara	820	12344	15	80	154
2013-15	Tumakuru	625	22815	37	332	69
2013-14	Shivamogga	900	16270	18	477	34
2012-15	Progressive	8731	172618	20	1586	109
2014-15	Shivamogga	0	6394		0	
2012-15	Grand Total	8731	179012	21	1586	113

Appendix 2

List of Beneficiaries who reported 100% Mortality

Name and contact No.	Address (Village, GP, Taluk)
1. Gouramma, Bhadrappa, (9535354628), 2. Gangamma, Chikka Muniyappa, 8970554830, 3. Muniyamma, Chikka Narayanappa	C.T.Mangala, Mandibele, Devanahalli
1. G.M. Mohan, Miniyappa, (9901009033)	Govindapura, Jadiganahalli, Hoskote
1. Harish, Late Anjinappa, (9008668851) 2. Anil Kumar, Late Anjinappa, (9035657670)	Bidaraguppe, Bidaraguppe, Anekal
1. Munithayamma, T.Venkatappa, (9741894248) 2. Padmamma, Venkatesh, (9036467079), 3. Munithayamma, Ramanjinappa (9980998201) 4. Manjula, Manjunath (9035357489) 5. Radhamma, Narayanappa (9945317649) 6.Sudha, Prasanth (8123034779) 7. Venkatesh, Thammaiah (9880785372) 8. Anasuyamma, Muniyappa(--). 9. Rathnamma, Ramesh (8710914323) 10. Mohan, Raghu (9036681057) 11. Babi Rani, Avula Reddy (9901422174)	Doddajala, Doddajala, Bengaluru North
1. Chikka Anjineya, Muni Anjinappa, (9731725133) 2. Anjinappa, Hanumappa (9591448597) 3. Chinnamma, Mini Anjinappa (8710926337) 4. Lakshmi, Gangadhar (9980327254)	Bynahalli, Meenakunte Hosur, Bengaluru North
1. Sumithra, Ravi, (8105234726) 2. Lakshmi, Muniraja, (8147524951)	Chikkajala, Chikkajala, Bengaluru North
1. Krishnappa, Dekappa, (8904749098) 2. Akkayamma, Doddaiiah (--). 3. Rangappa, Chikka Anjinappa (--)	Marinayakanahalli, Meenakunte Hosur, Bengaluru North
1. Narayana Swamy, Hanumaiah (--). 2. Narasimhaiah, Anjinappa (7859857380) 3. Muni Kadirappa, Ningappa (8550815324) 4. Nagaraj, Narasimhappa (9986787763)	Bettahalasur, Bettahalasur, Bengaluru North
1. S M Murthy, Muni Krishnappa, (9845895189) 2. Anjinappa, Vatte Ramanna (9686271019) 3. Byappa, Muniyappa (9271601727) 4. Muni Raju, Kempanna (7766957689) 5. S. Surendra, S M Shivanna (7411016649)	Shivakote, Shivakote, Bengaluru North
1. Narasamma, , Kengaiyah (--)	Anepalya, Agara, Bengaluru South
1. Geetha Bai, Mohan Singh, (9448740066) 2. Reshma, Sabyu (9741960601)	Kasaba, Madhigiri, Madhugiri, Madhugiri
1. Krishna Murthy, Narasimhappa, (--). 2. Gangamma, Puttappa (--). 3. Suvarnamma, Siddalingappa (--). 4. T N Nagaraiah, Late Nanjappa (9141847391) 5. Shivanna, Siddalingappa (7406840126)	Thaggihalli, Puravara, Madhugiri

NB: 1. The beneficiaries from Anekal and Hoskote Taluks pertain to 2012-13 and 2013-14, respectively. In case of remaining Taluks the scheme year has been 2014-15.

Appendix 3
Photo Gallery

Bengaluru Rural District



Aruna, K.B. Hosahalli



Amaresh, Hasigala



Sarojamma, C.T.Mangala



Indiramma, C.T.Mangala



C.V.Veerabhadrappa, C.T.Mangala



Muniswamappa, Papanahalli

Bengaluru Urban District



Akkayamma,



Gowramma, Bettahalasur



S M Murthy, Shivakote



Venkatappa, Shivakote



Shamanna, Shivakote



Nagaraju, Shivakote

Mandya District



Aravind, Mallanakuppe



Putta Thayamma, Mallanakuppe



Sheshagiri, Kesthur



C.Kumar, Tubinakere



Kamamma, Arethippura



Mangamma, Kothipura

Ramanagara District



Kariyappa, Medaradoddi



Narayana Swamy, KSBeedi, Ramnagar



Ramesh, Bilagumba



Muniyappa, Medaradoddi



Susheelamma, Channamanahalli



Chandre Gowda, Palabavidoddi

Tumakuru District



Annayyappa, Kondligatta



Govindappa, Kondligatta



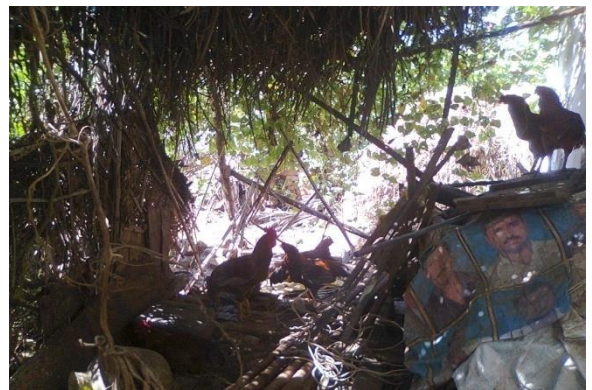
Yoganand, Kattehalli



Rajashekar, Kasaba, Madhugiri



N.Rangappa, Hunisegatta



Rajashekar, Kasaba, Madhugiri



TRA- Jan-2015 IRA- Nov-2015 DRA- April-2016 FNO- KEA 162 EVN 2014 (2)



ಕರ್ನಾಟಕ ಮೌಲ್ಯಮಾಪನ ಪ್ರಾಧಿಕಾರ
Karnataka Evaluation Authority

**EVALUATION OF THE PERFORMANCE OF RURAL BACKYARD POULTRY
FARMING IN KARNATAKA IMPLEMENTED BY DEPARTMENT OF ANIMAL
HUSBANDRY AND VETERINARY SERVICES**