



Impact of live stock development for sustainable livelihood generation through backyard poultry trainings

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ABSTRACT : Bhagavatula Charitable Trust (BCT) is a non-profit organization working in the rural Visakhapatnam district since 1976. Hallmark of BCT's programs has been involvement community in their own development. Visakhapatnam Krishi Vigyan Kendra (KVK) is under the aegis of BCT. KVK is offering necessary technical support during the follow up visits. There is good demand for the eggs from the improved breeds like Vanaraja, Giriraja and Gramapriya breeds. On an average the farmers are getting 170 eggs annually and 5 kgs of meat from each bird giving an additional income Rs.2500. From a batch of 20-25 birds each family is getting an additional income of Rs.1000 per month. The back yard poultry has given a boost to rural women and giving supplementary income and additional employment especially to house wives. Through study it was inferred that The Backyard poultry programme is found to quite feasible and handy program can be handled by wide range of rural women like agricultural labourers, Anganwadi teachers and housewives. It was found that on average there is 266.88 per cent of increased employment for rural women. Backyard Poultry Trainings proved that there is about 86 per cent gain in knowledge among the poultry farmers. The beneficiaries got hands on experience during the training program and started backyard poultry in their respective villages. Since, Backyard poultry can be operated throughout the year little infrastructure and investment, It is giving good employment opportunities to get themselves empowered.

KEY WORDS : Vanaraja, Backyard poultry, Employment, Knowledge

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INTRODUCTION

Backyard Poultry (BYP) is the average person raising chickens, turkeys, ducks and geese for his personal use and sale. Poultry industry in India has registered a phenomenal growth during the last four decades making it one among the world leaders in poultry production. Though the poultry development in the country has taken a quantum leap in the last three decades, the growth has been restricted to commercial poultry. Rural Backyard poultry, though still contributing nearly 30 per cent to the national egg production, is the most neglected one. 70 per cent of the poultry products and eggs are consumed in urban and semi urban areas and rural consumption is quite low. The development of organized poultry has infact masked

the contribution of backyard poultry or house hold poultry in rural sector, 52 and 31.23 per cent of the total poultry population at national and state level (Andhra Pradesh), respectively. The backyard poultry is significantly contributing to the nutritional and livelihood security amongst rural poor.

Backyard poultry in India is characterized by small flock size consisting of 5-10 predominantly non descriptive birds maintained in extensive system under zero input conditions; it is well known fact that a fairly significant proportion of the landless and marginal farmers get their living from poultry and other small ruminants. Backyard poultry requiring hardly any infrastructure set-up, but fetch the owners much needed animal protein and supplementary income. Besides nutritional supplementation, Rural backyard poultry empowers women. Thus enriching small farmer and landless labour families through a more holistic and semi-reliant approach not only in terms of improvement of income, employment and nutrition status but also in terms of fostering community development and gender empowerment, is envisaged through Backyard

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poultry program. Livestock rearing has always been an integral part of Indian culture and we have one of the largest repositories of farm animal biodiversity in the world. These animals are reared under different production systems, ranging from extensive to intensive. Of late, challenges in the form of shortage and high cost of agricultural labour, inadequate conservation of indigenous animal genetic resources, impact of climate change, spread of zoonotic diseases and social awareness about the environmental impact of animal agriculture are threatening the sustainability of livestock production across the world. This Model Training Course aims to address these very challenges.

Need of backyard poultry :

The need for development of varieties suitable for backyard production in India was visualized by poultry breeders. The department of Animal Husbandry and Dairy has taken up in association with Indian Council of Agricultural Research a targeted program for up gradation of low input technology birds through their All India Co-ordinated Research Project on Poultry. The initiative has since developed and released birds like Vanaraja, Giriraja, Krishibro, Krishilayer, Caribro, Carired, Gramapriya, Naked neck broiler, Dwarf broiler, CARI-Nirbheek etc. by making available these breeds for further multiplication and distribution among farmers. Although Dry land agriculture has become non-remunerative majority cultivators are engaged in this risk prone agriculture. The income level of the farmers is at subsistence level. The financial decision making lies with the male member of the family.

The situation of women in the village is miserable, where practically for one or two rupees also they have to depend on their male counterpart. Women in India nearly constitute half of the population and the rural women contribute up to 70 per cent of the various agricultural and 63 per cent of Animal Husbandry activities as compared to men. When we analyze the Socio-Economic situation of women in rural area the situation is grim. In all human development indicator persists namely health, education, nutrition, social responsibilities economic empowerment. They are much below men. It can be said that feminization of poverty is prevailing in rural areas. The approaches to poverty alleviation focuses on systems for delivering goods and services on one hand and providing income generating activities on the other hand. As part of these promoting backyard poultry was identified as most feasible activity for the women to get some income and also elevate the nutritional status of the family. As the requirement of individual farmer is very small and are scattered in an operating area, promotion of chick rearing units as separate enterprise for rural youth may yield desirable results in up scaling the backyard poultry production.

Locale of study :

The State Andhra Pradesh is blessed with rich livestock

resources. It is the native place for pride breeds of Ongole and Punganur Cattle, Nellore Sheep and Aseel Poultry. Visakhapatnam District is having a Total population is 4,288,113 compared to 3,832,336 of 2001. As per the approved figures of Livestock Census 2007 of Government of India, the State has the highest number of Sheep-255.39 Lakhs (36 % of country); Ovines-351.65 Lakhs (17 % of country) and Poultry Population-124 Lakhs (20 % of country). The state stands second in Buffaloes and total Livestock Population' third in Bovine population; fourth in total breedable population; Sixth in Crossbred cattle and Goat population and Eighth in Cattle Population in the country (Table A).

In Thailand, poultry sector is the main economic growth of livestock sector, especially broiler production. The rapid expansion in broiler production has been made possible by the increase in the number of commercial farms or contract farming. The objective of this research was to understand better how contract farming works, who gets involved and why and who benefits from the agreement. The study is based on the broiler file survey in Chiang Mai province of Thailand. As the results, contract farming looks quite attractive for farmers as well as for private companies but most of the farmers complained about long waiting until the delivery of the next cycle of chicks have started (Areerat *et al.*, 2012).

Choudhuri (2009) Study was undertaken to evaluate the impact of training programme on poultry farming with Nicobari fowl and to study the different traits under backyard system with supplemental feeding. It is an endangered and endemic poultry germplasm of Andaman and Nicobar Island and highest egg producer among all the indigenous breeds of India. Some farmers provide small low cost houses for the shelter of birds using local materials. Some farmers even did not provide any house and the birds used to take shelter in the bushes or trees for shelter at night. Usually, the birds after laying in the morning used to walk to long distance in search of feed and used to come back only at dusk. There are three strains of Nicobari fowl, namely, Brown, Black and White Nicobari fowl. The total estimated population of this breed is about 7524. The per cent adoption of training programme varied widely. It was highest in 1997 (76 %). The body weight at 8 week age and weight at maturity for males differed significantly. Annual egg production under backyard was 151 eggs and henhouse egg production under deep litter was 41.56 per cent. There was no significant difference of age at first egg and egg weight between different management systems.

The hatchability under natural incubation was higher. The mortality percentage also was higher in backyard condition. So the impact of training on poultry farming and rearing of improved Nicobari fowl was beneficial under backyard condition. PPLPP (2009), There is evidence that growth in the livestock sector can significantly contribute to economic growth and poverty reduction, because the largest share of

the rural poor are partly dependent on livestock for their livelihoods and the demand for food from animal source is increasing relentlessly in developing countries (Ali, 2007; Khan, 2004). Broiler breeder age is one of the most important factors that affects on egg properties. However by increasing the age of broiler breeder flock, the quality of eggs and consequently the quality of their chick products would be changed. In order to study the effect of broiler breeder flock age on the various aspects of chick products, 300 fertilizable eggs were selected randomly, from 3 broiler breeder farms. Selected eggs were collected from broilers that were 30 (young), 36 (peak), 43 (after peak), 53 (old), 60 (very old) and 82 (molted) weeks old. Collected eggs were stored during 3 to 4 days in the ambient temperature.

Qualitative and quantitative aspects of eggs including egg weight, albumen height yolk, height thickness of egg shell, yolk colour, Albumen and yolk PH and Hugh unit were studied. Trait Analysis was done by ANOVA procedure of SAS statistical software. To compare the means, Duncan test was used. The effects of age and breeder farms on the egg weight, yolk colour, yolk and albumen PH, yolk and albumen height, shell egg thickness and Hugh unit were significant (Gharahveysi *et al.*, 2012). 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 (Blench *et al.*, 2003). India's poultry sector is a case in point. Per capita consumption of poultry meat rose from 0.2 kg in 1970 to 1.6 kg in 2003 (FAO, 2008); 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 (GOI, 2005).

In the most recent years, however, the Government of India has recognized the potential of small-scale poultry sector development for poverty reduction (GOI, 2006; 2008). The Eleventh Five Year Plan (2007-2012) of the Government of India which is titled 'Inclusive Growth-stresses that economic growth, including agriculture, should be more balanced and inclusive than it has been so far. It sets a target GDP growth rate of 9 per cent per year, with agriculture anticipated to grow at 4 per cent per annum. Within agriculture, the livestock sector is expected to grow at between 6 and 7 per cent per year, with poultry growing at 10 per cent per year. 'For growth to be at all inclusive, the agricultural strategy must focus on the 85 per cent of farmers who are small and marginal, increasingly (especially) female and who find it difficult to access inputs, credit and extension or to market output special programmes need to be designed and implemented to enable small farmers to go for high value commercial activities in crop production, dairy, poultry, fisheries (GOI, 2007). 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.

Backyard Poultry (BYP) is a good practice is based on the premise that promotion of backyard poultry farming can help the State to bridge the gap between demand and supply of eggs and poultry meat as well as generate self-employment to reduce poverty and empower rural women. It reflects on the Family-based Poultry Distribution Schemes of the Government of West Bengal and how these schemes can help in poverty reduction, improve food supply and lead to sustainable development of the rural population. Czech *et al.* (2005) have been investigating the production problems facing backyard poultry-keepers in two locations in rural India, Udaipur District in Rajasthan and Trichy District in Tamil Nadu and seeking to work with poultrykeepers to address some of them. Backyard poultry-keeping is a significant livelihood activity for many poor rural families in India and for women in particular. A baseline survey of 90 backyard poultry-keepers provided a general overview of socio-economic factors, practices and constraints. Serious problems were identified in both locations and particularly in the Udaipur villages, with high mortality rates in chickens and poor hatchability rates. In both locations the project found that for the period under investigation predation was a more important cause of mortality than disease. On-farm trials to improve hatchability rates found technologies based on locally available materials to be effective. A survey of the poultry-keepers' agricultural knowledge and information systems identified their main sources of information and the most useful media for reaching them. Research findings:

- There are variations in scavenging poultry systems (e.g., in terms of main uses of birds, severity of constraints), between different ethnic groups and between the landed and the landless.
- The productivity of scavenging poultry systems tends to be low, with high mortality rates and low hatchability rates.
- Newcastle Disease (ND), which is widely believed to be the main constraint affecting scavenging chickens in India, was not the major cause of mortality in the project locations: the main cause was predation, by birds of prey and mammals.
- There is considerable scope for improving the productivity of scavenging systems with low-cost interventions and this may enhance their robustness in the face of a burgeoning commercial poultry sector.
- Effectively conveying extension messages to potential users will require the use of mass media (radio in particular, but also newspapers and television) and the social infrastructure of women's self-help groups.

Fulzele (1986) observed a significant improvement in the knowledge among trainees after the training programmes. The trainees were found highly satisfied with the training

programmes of KVK which were based on interest and needs of the trainees. Mitra (1981) in Participation of women in Socio-economic development, Women and Development, UNESCO narrated that Female work force participation in the informal sector was 49 as against 15 to 17 per cent of males. Vidyavathi *et al.* (2011) in women in agriculture narrated that Rural women from the most important productive work force in the economy of majority of the developing nations including India. Agriculture, the single largest production endeavour in India, contributing about 18 per cent of GDP, is increasingly becoming a Female activity. Agriculture sector employs 4/5th of all economically active women in the country 48 per cent of India's self-employed farmers are women. There are 75 million women engaged in dairying as against 15 million men and 20 million in animal husbandry as compared to 1.5 million men.

The women are the backbone of Agricultural work force but worldwide her hard work has mostly been unpaid. She does the most tedious and back-breaking tasks in Agriculture, animal husbandry and homes. In extension activities the women is now the centre point and activities are being planned keeping her in view. Her enlightenment will change the face of the rural India. Several programmes started at the National Centre for women in agriculture and Krishi Vigyan Kendras, are the right steps in this direction. Ramaswamy (1991) studies. The role played by women with in the organized and unorganized sector in the Indian economy. It briefly delineated various governmental schemes designed to improve the socio-economic status of women in "Women and Development". The World Bank has suggested that empowerment of women should be a key aspect of all social development programmes (Bank, 2001). ICAR is an innovative institution providing for (i) effective linkage among researchers, farmers and extension workers (ii) practical approach to training through "Learning by doing" (iii) flexible syllabi based on survey and needs of farmers and location specific requirements. By the year 2011 there were 600 KVKs sanctioned under the administrative control of ICAR institutions, state agricultural universities and voluntary organizations (NGOs). It is now policy of the government to establish more KVKs to fulfill the target of two KVKs in each district in Agriculture, Horticulture and Animal Husbandry. ICAR Reports (1975-2011). (Lennie, 2002) illustrated the interrelationships between the four forms of empowerment that were identified and summarizes the key features of each form of empowerment. Although these four forms of empowerment are discussed separately in this study, there are clearly many interrelationships and overlaps between them.

Livestock production trends: (FAPCCI, 2011) :

The state stands first in Meat (6.79 Lakh MTs) and Egg (1940 Crores) Production and second in Milk (104.30 Lakh MTs) Production in the country as per the approved Estimates of Major Livestock Products for the year 2009-10. The production statistics for the year 2010-11 is provided below:

- Dairy farming
- Heifers farming
- Male calf farming for beef fattening
- Milk cooling/chilling and processing
- Milk collection centres
- Chaff cutters in commercial lines (Stationery and Mobile)
- Milking machines
- Vermi compost units
- Bio gas plant
- Cow urine filtration units for medicinal use on commercial basis.
- Ongole/Deoni breeding farms for production of draught bulls on commercial lines.
- Dairy products
- Feed and fodder production/processing.
- Mineral mixture and supplements.
- Food processing.
- Pharmaceuticals.
- Service provision.
- Consultancy.
- Technology transfer.
- Financing.
- Export/Import.

Target group of entrepreneurs :

- Educated Unemployed youth.
- Self-help group members.
- Interested farmers with background experience.
- Small and Marginal farmers with small land holdings
- Horticulture farmers.

Schemes available for poultry development in Andhra Pradesh:

- Centrally Sponsored Scheme for Establishing "Poultry Estates" and Mother Units For Rural Backyard Poultry.
- NABARD scheme for establishment of Layer Poultry Farm.
- NABARD scheme for establishment of Broiler Poultry Farm.
- Poultry Venture Capital Fund (Subsidy) Scheme.

MATERIAL AND METHODS

The Krishi Vigyan Kendra, Visakhapatnam working for Rural development since 1996. Out of many initiatives in rural empowerment activities, Back yard poultry is proved most feasible and successful programme especially for rural women. From 1996 the KVK has introduced many improved breeds like

Table A : Livestock population in Visakhapatnam district

Species	National position			
	Number (In lakhs)	Value (In crores)	(%)	Position
Cattle	112	11200	5	8th
Buffalo	133	13300	11	2nd
Sheep	255	2550	35	1st
Goats	96	960	5	7th
Pigs	4.5	23	0.5	8th
Poultry	1,240.00	1240	21	1st
Total livestock	1,840.50	29273	18	1st

Table B : Products through livestock details in Visakhapatnam district

Livestock product	Quantity produced during 2010-11	GSDP contribution at current prices (Rs. Cr.)	National status		Contribution to GSDP	Growth rate (%)
			(%)	Position		
Milk	112.48 Lakh MTs	20,236	9.27	2nd	3.59	6.5
Meat	7.47 Lakh MTs	7,863	16.92	1st	1.97	10.0
Eggs	2,013 Crores	3,764	32.41	1st	0.67	4.0
Others	–	2,844	–	–	0.51	–
Total	–	34,707	–	1st	6.74	7.0 +

Table C : Productivity/animal for livestock details in Visakhapatnam district

Species	Productivity/animal (in kgs)		Production (lakh MTs)		Growth rate (%)	
	Present	Potential	Present	Potential	Present	Potential
Cattle	1.50	8.00	28.00	175.0	7	15
Buffaloes	4.00	6.00	76.000	150.0	6	10
Sheep	10.00	15.00	1.500	2.5	11	12
Goats	10.00	15.00	0.670	1.0	9	12
Pigs	35.00	80.00	0.006	0.8	2	12
Poultry Meat	1.02	1.50	3.300	5.0	5	9
Poultry-Eggs						
Commercial	290 Nos	310 Nos	1824 Cr	2500 Cr	4	8
Village	60 Nos	120 Nos	115 Cr	600 Cr	5	12

Table D : Farmers knowledge test questionnaire from BCT-KVK

Item of knowledge	Answer
Van raja eggs can be hatched with local birds	(Yes/No)
Food grains and Household kitchen waste can be fed to Backyard chicks.	(Yes/No)
Chicks started laying eggs from 27 weeks.	(Yes/No)
Each Vanaraja Birds give 150-180 eggs.	(Yes/No)
Day old chicks will be given Marix vaccine.	(Yes/No)
R2B vaccine is given for raniket disease.	(Yes/No)
Vanaraja chicks start laying from 175 to 180 days.	(Yes/No)
In mother unit deep litter system is followed.	(Yes/No)
100 watts bulbs are used to brood for first 10 days.	(Yes/No)
In 500 days each Vanaraja bird will give 4-5 kg meat.	(Yes/No)

Giriraja, Vanaraja and Gramapriya are being introduced to rural women covering almost entire district. The specific strategy adopted by in introducing Backyard poultry programme is as follows. One day old Vaccinated chicks for Marex Disease will be brought from Project Director of Poultry, Rajendranagar, Hyderabad:

- Followed deep litter system
- Feeding schedule-broken rice feed and glucose water for first two days
- Chick feed was followed up to 18 days
- Afterwards layer and grower feeds will be followed
- Brooding-100 Watts bulbs up to 10 days
- Vaccination-Vaccination is one important and critical practice to be followed with great care to save the flock from different epidemics. The vaccination schedule is as follows.
- At first day-vaccine for marex disease
- At eighth day- lasota vaccine for Raniket disease + Skilled vaccine for gambora
- At 28th-30th day R2B for Raniket disease
- At every six months R2B for Raniket Disease
- The chicks will be reared up to two months at KVK
- Handing over the units (4 female +1 male) to beneficiaries after giving orientation training
- Egg laying will be started from 27th week
- Hatching will be done with the help of desi birds and flock will be developed
- Vaccination for Raniket with R2B at 8th month age during follow up visits
- Follow up visits, advisory services and vaccination for every 6 months
- Spent hens will be sold at 18 months age.

Distributor system of back yard poultry :

To make wider coverage of Back yard Poultry Program in different mandals of the district and to identify suitable beneficiaries, different institutions like DRDA, Dept. of Animal husbandry, Dept. of Agriculture under different programs ANTWA, NWDPRRA, Water sheds, Dept. of Soil conservation and other NGOs in the District like SVDS, ORRC, Sujana, Laya, Prgathi, Creators, Shakti, Sweep, SRDO, IRDS and Gramabhudaya were made involved. The program covered 30 Mandals and followed up with the help of the above mentioned institutes.

Breeds and batches introduced under backyard poultry by BCT-KVK :

Since 1996 BCT-KVK has introduced three Breeds namely Giri Raja, Vana Raja and Grama Priya in 25 batches. About 21,664 Birds have been introduced covering 475 villges in 30 Mandals of Visakhapatnam dt. The programme has covered about 1900 beneficiaries. Each beneficiary has given one unit (consisting of 4 female + 1Male). Before giving the units KVK is conducting Orientation Training programme (Fig. A). Process of Training at BCT-KVK on BYP) on Management practices, Low cost feeding techniques and Precautionary measures on seasonal Epidemics. A total of 21,664 birds were given to total beneficiaries of 1,900 of 475 villages covering 30 mandals. The beneficiaries were mainly selected from low income groups and participating in SHG activities. The beneficiaries are having land holding ranging from Nil to 1.5 Acres. The beneficiaries were given three days vocational training at Krishi Vigyan Kendra. During the training program knowledge test of the trainees was conducted through before after study, with a structured questionnaire for 50 trainees. The data obtained was presented as below. Impact of backyard poultry on knowledge level of poultry practices. Through the training programme there about 86 per cent gain in knowledge among the poultry farmers (Table E).

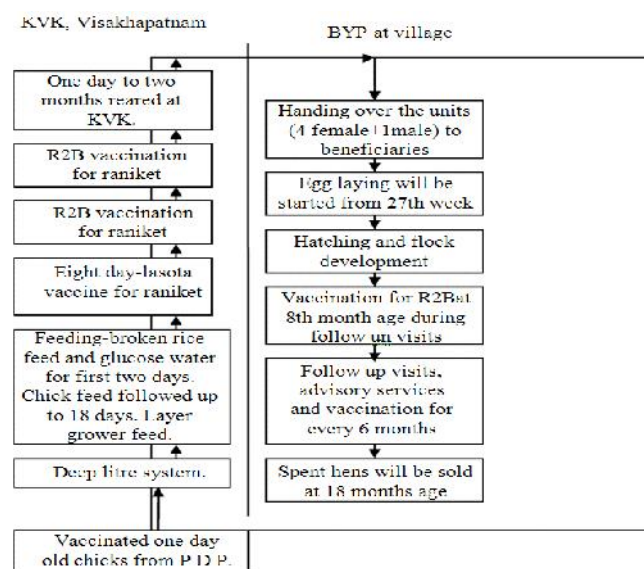


Fig. A : Back yard rearing training process at BCT KVK

Table E : Knowledge level of rural women on back yard poultry training given by KVK											
	I	II	III	IV	V	VI	VII	VIII	IX	X	Total score
Before	22.00	18.00	24.00	21.00	26.00	28.00	25	27.00	24.00	26.00	241
Present	45.00	48.00	44.00	46.00	43.00	47.00	45	42.00	46.00	42.00	448
% increase in knowledge	104.54	166.66	83.33	119.04	65.38	67.85	80	55.55	91.66	61.53	85.89

The beneficiaries get hands on experience during the training program and started Backyard poultry in their respective villages. The KVK is offering necessary technical support during the follow up visits. There is good demand for the eggs from the improved breeds like Vanaraja, Giriraja and Gramapriya breeds. On an average the farmers are getting 170 eggs annually and 5 kgs of meat from each bird giving an additional income Rs.2500. From a batch of 20-25 birds each family is getting an additional income of Rs.1000 per month. The back yard poultry has given a boost to rural women and giving supplementary income and additional employment especially to house wives.

RESULTS AND DISCUSSION

The findings of the present study as well as relevant

discussion have been presented under following heads :

Impact of backyard poultry on employment and income levels:

A study was taken up with extranees of backyard poultry, to know its impact on income generation and providing additional employment. The study was under taken on before and after mode through a structure questionnaire 25 beneficiaries scattered in 5 mandals was selected randomly for the study. The results found were encouraging. It was observed from the study that, the women engaged in the traditional occupation and restricted as house wives were gaining additional mandays of work by engaging themselves in Backyard poultry programme. The findings are presented in the Table 1 and Fig. 1. Through study it was inferred that the backyard poultry programme is found to quite feasible and

Table 1 : Impact of backyard poultry on employment

Name	Employment (No. of man days of work)		Generated (% increase in employment)
	Additional mandays of work		
	Before	After	
K. Mangathalli	Agri labour (130)	Agri labour + Back yard poultry (330)	200(153.84)
N. Jaya	Fish vending(120)	Fish Vending + Back yard poultry(300)	180(150.00)
Nanepalli Lakshmi	House wife(Nil)	Back yard poultry(200)	200(153.84)
N. Madhavi	Anganvadi teacher (180)	Anganvadi teacher + Back yard poultry(330)	150(83.33)
B.H. Ramadevi	Family labour (120)	Back yard poultry(280)	160(133.33)
G. Lakshmi	House wife (Nil)	Back yard poultry(280)	280
P. Bhavani	House wife (Nil)	Back yard poultry(280)	280
S. N.Ramalakshmi	House wife (Nil)	Back yard poultry(280)	280
A. Savithri	Cattle rearing (200)	Cattle rearing + Back yard poultry(360)	160(80.00)
R. Kanthamma	Agri labour (130)	Agri labour + Back yard poultry(330)	200(153.84)
M.Satyavathi	House wife (Nil)	Back yard poultry(200)	200
K. Ramanamma	Agri labour (130)	Agri labour + Back yard poultry (330)	200(153.84)
V. Sandhya	House wife (Nil)	Back yard poultry(280)	280
P. Kanthamma	Labourer (140)	Labour + Back yard poultry (340)	200(142.85)
Adari Sunitha	Family labour(120)	Back yard poultry (300)	180(150.00)
P. Lakshmi	Agri labour (130)	Agri labour + Back yard poultry (310)	180(138.46)
S. Manikkam	Agri labour (130)	Agri labour + Back yard poultry(320)	190(146.15)
Sambasiva Rao	Agri labour (130)	Agri labour + Back yard poultry(340)	210(161.53)
Vara Lakshmi	House wife (Nil)	Back yard poultry (310)	310
Padma	House wife (Nil)	Back yard poultry (320)	320
Naga Lakshmi	Agri labour (130)	Agri labour + Back yard poultry (310)	180 (215.38)
Hemalatha	House wife (Nil)	Back yard poultry (210)	210
Joythi	Agri labour (150)	Agri labour + Back yard poultry (300)	150 (100.00)
Hari Sudha	Agri labour (125)	Agri labour + Back yard poultry(320)	195 (156.00)
Mutha chellayamma	Agri labour (130)	Agri labour + Back yard poultry(320)	190 (146.15)
Average employment (Mandays)	93	304	211(266.88)

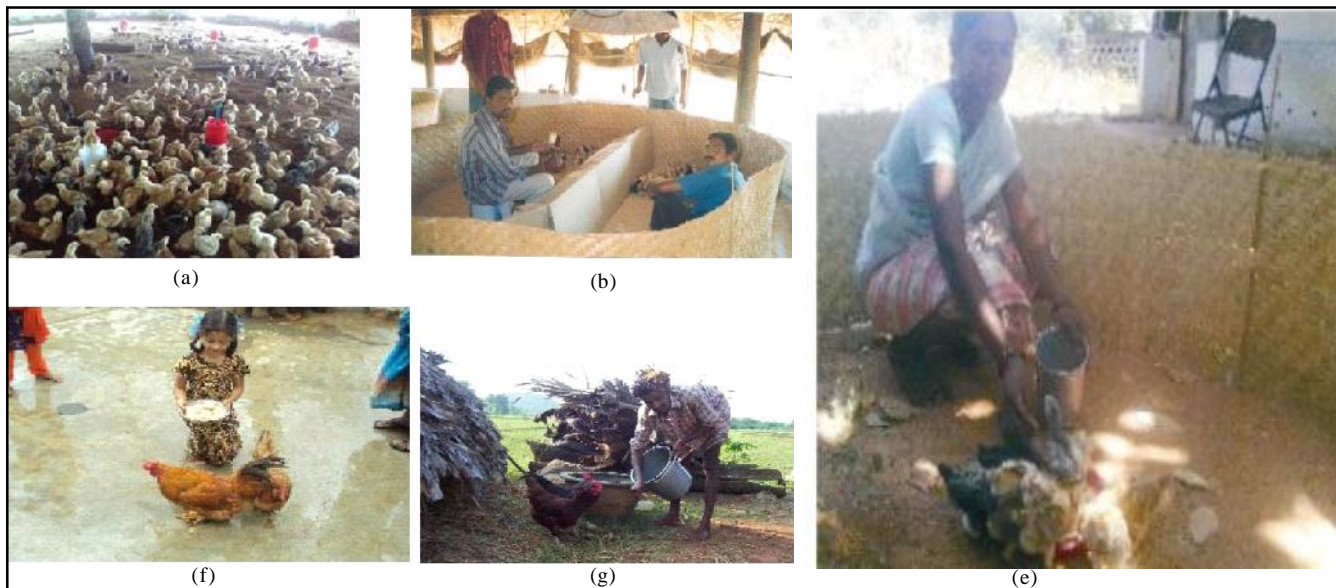


Fig. 1 : Growing of chicks in back yard poultry (a) Day Old Chicks Bought From PDP, Hyderabad (b) Vaccination (c) One month old chicks for distribution to farmers (d) Distributing to farmers (e) Birds rearing by women at backyards (f) Chicks ready for income generation

Table 2 : Impact of backyard poultry on income levels

Name of the beneficiary	Income/year (%)		Change in income
	Before	After	
K. Mangatali	2500	2500+2000	80.00
N. Jaya	6000	6000+2200	36.66
Nanepalli Lakshmi	-	3000	3000.00
N. Madhavi	1000	1000+2500	250.00
B. H. Ramadevi	-	2500	2500.00
G. Lakshmi	-	3000	3000.00
P. Bhavani	-	2200	2200.00
S. N.Ramalakshmi	-	2200	2200.00
A.Savithri	15000	15000+1800	10.00
R. Kanthamma	2500	2500+1800	72.00
M.Satyavathi	-	2200	2200.00
K. Ramanamma	2500	2500+2500	100.00
V. Sandhya	-	2000	2000.00
P. Kanthamma	4000	4000+2100	525.00
Adari Sunitha	-	2000	2000.00
P.Lakshmi	2500	2500+2500	100.00
S.Manikkam	3500	3500+2500	71.42
Sambasiva Rao	3000	3000+2500	83.33
Vara Lakshmi	-	2500	2500.00
Padma	-	2500	2500.00
Naga Lakshmi	3000	3000+2500	83.33
Hemalatha	-	2500	2500.00
Joythi	3500	3500+2500	71.42
Hari Sudha	3000	3000+2500	83.33
Mutha	2000	2000+2500	125.00
Chellayamma			
Total income	54,000	1,23,000	127.70

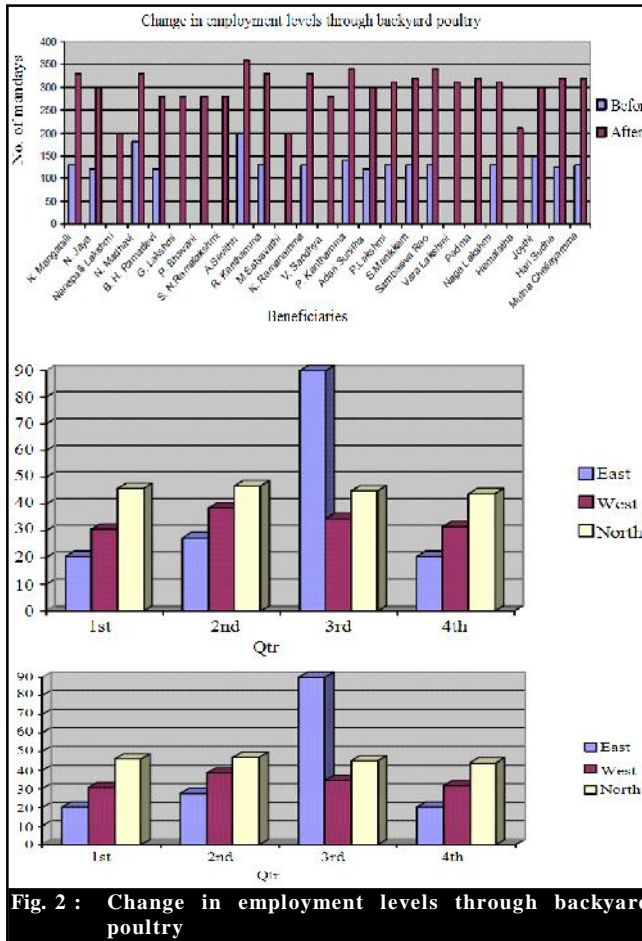


Fig. 2 : Change in employment levels through backyard poultry

handy programme can be handled by wide range of rural women like agricultural labourers, Anganwadi teachers and housewives. It was found that on average there is 266.88 per cent of increased employment for rural women (Table 2). Since backyard poultry can be operated through out the year little infrastructure and investment, It is giving good employment opportunities to get themselves empowered (Fig. 2 and 3).

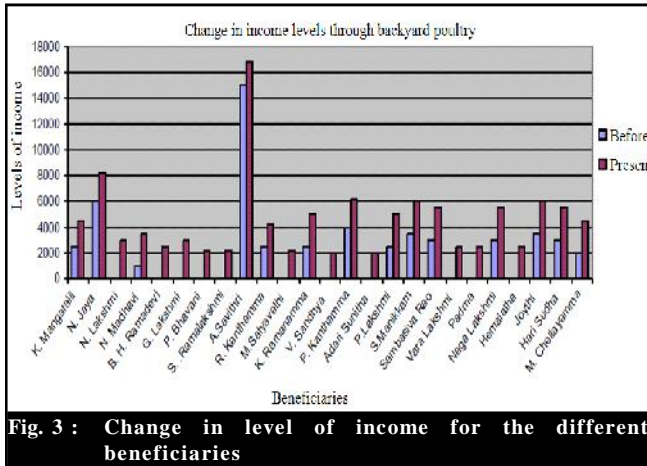


Fig. 3 : Change in level of income for the different beneficiaries

Since the Backyard poultry program is found to economically viable and technically feasible to be handled at village level, the study reveals that on an average there is 127.70 per cent increase in income. This implies that there is 100 per cent increase in Annual income among the rural women and leads to women empowerment. This indicates good scope to establish sustained livelihood in rural areas through backyard poultry.

Change in income levels of women beneficiaries through backyard poultry :

- The backyard poultry as one of the livelihood option was proved to be a feasible in handling as well as generating gainful employment and income.
- The above study covering different sections of women ranging from an agricultural labourer to a restricted housewife, the backyard poultry improved the financial status and provides additional employment conveniently to different sections of rural women.
- The rearing of the birds resulted in improving the cash in hand and ultimately effecting the financial decision making of women at home.

Conclusion :

It was observed from the study that, the women engaged in the traditional occupation and restricted as house wives were gaining additional mandays of work by engaging themselves in Backyard poultry programme. Through study it

was inferred that The Backyard poultry programme is found to quite feasible and handy program can be handled by wide range of rural women like agricultural labourers, Anganwadi teachers and housewives. It was found that on average there is 266.88 per cent of increased employment for rural women. Since backyard poultry can be operated through out the year little infrastructure and investment, It is giving good employment opportunities to get themselves empowered.

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