

Socio-economic status of emu farmer in Marathwada region of Maharashtra state

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ABSTRACT

The data on selected socio-economic aspects were collected by interviewing the respondent farmers in the Marathwada region of Maharashtra state. The overall total land holding of sampled emu farmer was 5 hectares with 14.14 emu birds. The average size of family was 6.13. Average irrigated area was 3.92 ha and rainfed area was 1.06 ha. The study revealed that crop like cotton, soybean, groundnut, wheat, *Rabi* jowar were mostly grown in the study area. In selected area, one emu farmer's (a case study) total land holding was 9 hectares with 50 pair of emu birds. The average size of family member was 5. Irrigated and rainfed area were 4.00, 4.80 ha, respectively. Average total live stock held by sample farmer was 2.12 and in case of one farmer total live stock number was 3.

INTRODUCTION

In India emu farming was first started in the year 1998 in Hyderabad. Emu egg is used for table delicacy having pleasant taste. Emu eggs can be stored for long periods for consumption purpose. Broken egg shell's are used for jewellery items. Emu feather demands for both fashion in the art and craft industries. It is used for duster, masks etc. Emus small bones are used for hair picks and art works. Emu oil is a natural product with strong anti-inflammatory properties. Emu meat gives better taste (Dickens, 1995; Jeffery, 1998). It is higher in protein than goat and lower in cholesterol than chicken. Emu meat called 'new heart healthy meat' contains low cholesterol. It is rich in vit. E, vit. B₁₂ and essential fatty acids help to lower down cholesterol as well as level of blood presser and blood sugar. Farmer's profit can be increased through nutrition requirement of emu and better value addition (Smith *et al.*, 1995; Scheideler and

Sell, 1998; Aznar *et al.*, 2000; Bindu Madhuri and Murthy, 2014).

Emu farming offers great scope and potential because of its supplementary income and additional employment (Maistrenko, 1995; Peter O' Malley, 1997). It is not merely for higher monetary return but also with better taste and nutrition (Bindu Madhuri and Murthy, 2014). Emu oil is used for cosmetic and pharmaceutical uses for joint pain, muscle pain, insect bites, minor burns etc. Oil is used for hair care product in shampoo, hair care conditioner, in dry and damaged hair, aloe vera products etc. The products like belts, purses, wallets, jackets, money clips etc. are prepared from emu leather.

MATERIAL AND METHODS

In the first stage, Hingoli, Parbhani and Nanded districts were purposively selected from Marathwada region of Maharashtra state. In the second stage, from each selected district two talukas were selected purposively because of

availability of emu farmers. From Hingoli district, Hingoli taluka and Kalamnuri taluka and from Parbhani district Parbhani taluka and Jintur taluka and from Nanded district Nanded taluka were selected randomly. In third stage, Malsule, Savangi, Kavatha, Mupo, Kesapur villages from Hingoli district, Bori and Nagagaon from Parbhani district, Nilaphata from Nanded district were selected purposively because of availability of Emu farmers. In the fourth stage, all Emu farmers were undertaken from selected villages. Thus, total emu farmers were 15.

The data from the selected emu farmers were collected by personal interview with respondents. Data on educational status, family information, land holding, cropping pattern, emu birds feed, human labour, construction of emu farm, feeding, health care, eggs produced of emu farmers were collected. For analytical study, simple statistical tools *viz.*, means, frequencies, average, percentage were used.

OBSERVATIONS AND ANALYSIS

The findings of the study as well as relevant discussion have been summarized under the following heads:

Socio-economic status of sample farmers :

Details of socio-economic status of selected farmers are presented in Table 1. Total sample size taken was 14. The total land holding of 14 sample was 5 hectares. The average family size of selected sample composed of 6.13 members with 1.78 male (29.03 %), 1.57 female (25.61 %) and 2.78 children (45.36 %). It was observed that average age of farmers was in the range of 31 to 50 years, 57.15 per cent farmers were in the range of 41 to 50 years whereas, 42.85 per cent farmers were in the range of 31 to 40 years. It was observed that the per cent of Primary level educated farmers was the highest (50 %), illiterate and High School level were 21.42 per cent each and graduate and above was 7.16 per cent.

A case study of one emu farmer (for hatchery unit) :

The present study was undertaken for one emu farmer in Hingoli district of Marathwada region. The study was analysed and presented.

Socio-economic status of a farmer revealed that his total family size was 5.0 members. Education level of the farmer was graduate. He was well educated, was agriculturist as well as having emu farming business. He was having 50 emu pair birds. He was one of the biggest emu farmers in Marathawada region. He was having high profit from this business through hatchery unit only.

Table 2 shows that the total land holding was 9 hectares. The average family size of selected sample composed of 5 members with 1 male, 2 female and 2 children. The average age of farmer was 40 years. It was observed that the education level of the farmer was graduate.

Table 1 : Socio-economic status of emu farmers (n=14)			
Sr. No.	Particular	Number	Percentage
Family size			
1.	Male	1.78	29.03
2.	Female	1.57	25.61
3.	Children	2.78	45.36
	Total	6.13	100.00
Age (years)			
1.	31 to 40	6	42.85
2.	41 to 50	8	57.15
	Total	14	100.00
Education level			
1.	Illiterate	3	21.42
2.	Primary level	7	50.00
3.	High School	3	21.42
4.	Graduate and above	1	7.16
	Total	14	100.00
Occupation			
1.	Farmer as well as emu farming business	14	14.00
2.	Service	0	0
	Total	14	100.00

Table 2 : Socio-economic status of one emu farmer (A case study) (n=1)		
Sr. No.	Particular	Number
Family size		
1.	Male	1
2.	Female	2
3.	Children	2
	Total	5
Age (years)		
1.	40 years	1
	Total	1
Education level		
1.	Graduate	1
	Total	1
Occupation		
1.	Farming as well as emu farming business	1
	Total	1

Land use pattern indicates the area available for cultivation. Land utilization pattern of the selected emu farmer was studied and presented in Table 3.

Table 3 : Land utilization pattern of selected emu farmers

Sr. No.	Particular	Area (ha)	Percentage
1.	Total land holding	5.03	100.00
2.	Irrigated area	3.92	77.93
3.	Rainfed area	4.03	20.48
4.	Permanent fallow land	0.08	1.59

It is revealed from Table 3 that the average size of holding of selected sample was 5.03 hectares. Out of which net cultivated area was 4.98 hectares. The contribution of irrigated and rainfed area was 3.92 hectares and 4.03 hectares, respectively. Permanent fallow land was 0.08 ha.

It is revealed from Table 4 that the average size of holding of selected sample was 9.0 hectares. Out of which net cultivated area was 8.80 hectares. The contribution of irrigated and rainfed area was 4.00 hectares and 4.80 hectares, respectively. Permanent fallow land was 0.20 ha.

Table 4 : Land utilization pattern of selected emu farmer (a case study)

Sr. No.	Particular	Area (ha)	Percentage
1.	Total land holding	9.00	100.00
2.	Irrigated area	4.00	44.44
3.	Rainfed area	4.80	53.33
4.	Permanent fallow land	0.20	2.23

Cropping pattern of sampled emu farmers :

Cropping pattern indicates proportion of area allocated by the emu farmers to different crops. Cropping pattern of all selected farmers is presented in Table 5. It is revealed from table that 3.92 hectare area was of selected farmer having irrigation facilities. The irrigated crops like cotton, groundnut, wheat, soybean were dominated in cropping pattern. Cotton + Tur showed the highest area (19.62 %) in *Kharif* wheat was observed (18.58 %) to be highest in *Rabi* season. The contribution of *Rabi* jowar was observed (7.26 %). Among the summer crops, groundnut contributed 18.09 per cent area followed by maize (2.06 %). The cropping intensity was to the extent of (194.37 %).

Cropping pattern of a emu farmers :

Cropping pattern of selected farmer is presented in Table 6. It is revealed from table that 4.0 ha. area of selected farmer having irrigation facilities. The irrigated crops like cotton, groundnut, wheat, soybean were dominated in cropping pattern. Cotton + Tur showed the highest area (25.31 %) in *Kharif* season followed by soybean (25.31 %). The contribution of wheat was observed (18.99 %) to be highest followed by *Rabi* jowar and safflower to the extent of 5.01 per cent each. Among the summer crops, groundnut contributed 12.62 per cent, area followed by maize (1.26 %). The cropping intensity was to the extent of 179.55 per cent.

Table 5 : Cropping pattern of emu farmers

Sr. No.	Crops	Area (ha)	Percentage
(A)	Kharif		
1.	Cotton + Tur	1.90	19.62
2.	Soybean	2.07	21.38
3.	Greengram	0.16	1.65
4.	Blackgram	0.05	0.52
5.	Jowar	0.80	8.26
	Total	4.98	51.43
(B)	Rabi		
1.	Wheat	1.80	18.58
2.	Gram	0.10	1.03
3.	Jowar	0.70	7.26
4.	Safflower	0.10	1.03
	Total	2.70	27.90
(C)	Summer		
	Groundnut	1.75	18.09
	Vegetables	0.05	0.52
	Maize	0.20	2.06
	Total	2.00	20.67
	Double cropped area	4.70	
(D)	Gross cropped area	9.68	100.00
(E)	Net cultivated area	4.98	
(F)	Cropping intensity (%)	194.37	

Table 6 : Cropping pattern of emu farmer (a case study)

Sr. No.	Crops	Area (ha)	Percentage
(A)	Kharif		
1.	Cotton + Tur	4.00	25.31
2.	Soybean	4.00	25.31
3.	Greengram	0.40	2.53
4.	Blackgram	0.40	2.53
	Total A.	8.80	55.68
(B)	Rabi		
1.	Wheat	3.00	18.99
2.	Gram	0.20	1.28
3.	Jowar	0.80	5.01
4.	Safflower	0.80	5.01
	Total B	4.80	30.41
(C)	Summer		
	Groundnut	2.00	12.62
	Maize	0.20	1.26
	Total	2.20	13.91
	Double cropped area	7.00	
(D)	Gross cropped area	15.80	100.00
(E)	Net cultivated area	8.80	
(F)	Cropping intensity (%)	179.55	

Position of farm implements and machinery of sampled farmer:

Implement machinery and hand tools are the main items of productive investment. Agricultural implements and machinery used by selected respondents were studied and are presented in Table 7. The per household, total inventory of implements and machinery was estimated to Rs. 27479.98. The selected farmer was having one, harrow, hoe, seedrill, sprayer, each. The number of spade, sickle, kurpi were more than two. The value of bullock cart, sprayer and plough was Rs. 6857.14, Rs. 2200.00 and Rs. 1371.42, respectively.

Sr. No.	Particular	No.	Present value (Rs.)
1.	Plough	0.85	1371.42
2.	Harrow	1.00	880.00
3.	Hoe	1.00	800.00
4.	Seed drill	1.00	835.00
5.	Bullock cart	0.85	6857.14
6.	Sprayer	1.00	2200.00
7.	Thresher	0.32	14285.71
8.	Spade	2.00	120.00
9.	Sickle	3.42	8571
10.	Khurpi	3.00	45.00
	Total	14.47	27479.98

Position of farm implements and machinery of a emu farmer:

Implement, machinery and hand tools are the main items of productive investment. Agricultural implements and machinery used by selected respondents were studied and are presented in Table 8. It indicated that the total inventory of implements and machinery was estimated to Rs.6680. The selected farmer was having two, harrow, hoe, seedrill, each. The number of spade, sickle, kurpi were more than two. The value of bullock cart, sprayer and plough was Rs.8000, Rs.1500, Rs.2000.00, respectively. The thresher recorded the highest amount of Rs. 40000.

Sr. No.	Particular	No.	Present value (Rs.)
1.	Plough	2	2000
2.	Harrow	2	1800
3.	Hoe	2	100
4.	Seed drill	2	1500
5.	Bullock cart	1	8000
6.	Sprayer	1	1500
7.	Thresher	1	40000
8.	Spade	3	120
9.	Sickle	4	100
10.	Khurpi	4	60
	Total		6680

Live stock position of a sampled emu farmer :

It is revealed from Table 9 that total livestock position of selected emu farmer was 2.12. The distribution of livestock revealed that proportion of bullock pair to the total livestock was the highest, 76.07 per cent followed by local buffalo 13.16 per cent. The proportion of local cow and goat was 7.35 per cent and 3.43 per cent, respectively.

Sr. No.	Live stock	No.	Present value (Rs.)	Percentage
1.	Bullock pair	0.71	31785.71	76.06
2.	Local cow	0.42	3071.42	7.35
3.	Local buffalo	0.35	5500.00	13.16
4.	Goat	0.64	1428.57	3.43
	Total	2.12	41785.7	100.00

Live stock position of selected emu farmers :

The efficiency of farm productivity is mainly based on the availability of livestock. The information of livestock owned by selected farmers is presented in Table 10. It is revealed from Table 10 that total livestock position of selected emu farmers was 3. The distribution of livestock revealed that proportion of bullock pair to the total livestock was the highest. (91.96 %) followed by local cow (8.04 %). The information regarding distribution of total milch animals with the selected farmers indicated that there were a total 287 milch animals with all the selected farmers, of which 20.56 per cent (59 animals) were local cows, 24.74 per cent (71 animals) were crossbred cows and 54.70 per cent (157 animals) were local buffaloes. The average numbers of milch animals per farm were 5.74.

Sr. No.	Live stock	No.	Present value	Percentage
1.	Bullock pair	2	80000	91.96
2.	Local cow	1	7000	8.04
	Total	3	87000	100.00

REFERENCES

- Anonymous (2005). Introduction for emu farming. Agro – one 15th July, 2005, 6 p.
- Aznar, A., Sendra, E., Navarroc, C. and Flores, A. (2000). Evaluation of quality parameters of commercial categories of ostrich meat. *Alimentaria*, 37(316) : 65-67.
- Bindu Madhuri, S. and Murthy, M.R.K. (2014). Value added chicken and emu meat production for innovative entrepreneurship development in Andhra Pradesh, India. *Asian J. Res. Social Sci. & Humanities*, 4(5) : 56-65.

- Burlin, F. (1996). Ostrich rearing for meat : prospects and methodology. *Informatore – Agrario*, **52**(44) : 67-72.
- Copper, R.G. (2000). Management of ostrich chicks. *World's Poultry Sci. J.*, **56**(1) : 33-44.
- Dickens, M. (1995). Raising emu is a family affair for Carrasco Clan. *The Tulia Herald*, v87, n24, June 15, 1995.
- Jeffery, J.S. (1998). Emu production. Texas Agric. Ext. Serv. Texas A&M University, College Station, TX.
- Janssens, G.P., Seynaeve, M. and Ryckeh, D. (1997). Nutritional aspects of the ostrich (Ratite) vlaams –Diergeneeskunding – Tijdschrift, **66**(4) : 153-160.
- Maistrenko, L. (1995). Growing emu population possible food source. The University Daily, Texas Teach University, November, 1995.
- Peter O' Malley (1997). Emu farming, the new rural industries. *A handbook for farmers and investors*. Rural Industries Research and Development Corporation (RIRDC), Department of Agriculture, Western Australia.
- Scheideler, S.E. and Sell, J.L. (1998). Nutrition guidelines for ostriches and emus. Neb Guide G 96-1303A. Coop. Ext. IANR, University of Nebraska, Lincoln, NE.
- Smith, W.A., Cilliers, S.C. and Mellett, F.D. (1995). Nutrient requirements and feed stuff values in ostrich (Ratities) production. *Feed Compunder*, **15**(8) : 22-29.

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