



Social and Economic Auditing of Beekeeping in Uttara Kannada, India

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Available online at: www.isca.in, www.isca.me

Received 16th October 2013, revised 29th November 2013, accepted 22nd December 2013

Abstract

Social and economic auditing of beekeeping in Uttara Kannada conducted between May 2008 – May 2011, showed that all beekeepers practiced beekeeping with *Apis cerana indica* and it is profitable as subsidiary industry. Most beekeepers of the study area acquired training in beekeeping from KVIC (57.97%), KVIB (3.9%) in collaboration with Beekeepers Co-operative Societies. NGO and trained beekeepers also played significant role in beekeeping training. The survey on the socio-economic aspects revealed that, 93% of beekeepers are happy with job satisfaction. 97.6% members of family liked beekeeping and 68% spouses participated in beekeeping. Only 3.6% beekeepers were involved in the preparation of value added products; 65.1% of beekeepers were not happy with loan facilities; and 80.7% of beekeepers were satisfied with marketing conditions.

Keywords: Social and economic auditing, beekeeping.

Introduction

Uttara Kannada, located almost at the center of Karnataka State, is a biological diversity hotspot. In order to utilize its natural resources people practice beekeeping besides agriculture, horticulture, animal husbandry and forestry for their livelihood. Farmers practice beekeeping as a subsidiary income generating activity by acquiring special skills¹. Beekeeping is one of major subsidiary economic activities in the district.

Very little information on socio-economic conditions of beekeepers of Ankola, Honnavar, Sirsi and Siddapur of Uttara Kannada is available. The sole objective of study is to provide substantial and comprehensive information on socio-economic conditions of beekeepers of Uttara Kannada.

Material and Methods

Beekeeping with *A.c. indica* has long been practiced in Uttara Kannada. Although, most beekeepers practice modern beekeeping, but a few follow traditional beekeeping with log hives and also honey hunting.

Description of the study area: Uttara Kannada (13^o52' to 15^o31' N and 74^o9' to 75^o10'E), one of the coastal districts of Karnataka, has been selected for the study. On the basis of geography and vegetation, the district is divided into four characteristic regions, namely coastal region, foothills of Uttara Kannada, hilly region and transition region. Out of 11 talukas of Uttara Kannada, 4 talukas namely, Honnavar, Ankola, Siddapur and Sirsi talukas were chosen for the observation and data collection. The study was conducted between May 2008 to May 2011.

Socio-economic auditing: 83 beekeepers belonging to Ankola, Honnavar, Sirsi and Siddapur were selected by random sampling. Data with regard to training camps was collected from them. In addition to this data from the records of bee cooperative societies for the number of person trained, sponsors of training like KVIC, KVIB and NGO involved in training is collected. Information with regard to socio-economic conditions of beekeepers was collected by questionnaire method. Various aspects like income from beekeeping, training sources and factors impacting socio-economic benefits are included in the study.

Results and Discussion

Training institutions: All the 83 beekeepers of the study area practiced beekeeping with *A.c. indica*. Data about the training camps is collected by personal interview of these 83 beekeepers as well as by collecting the information from Bee Co-operative societies. During the course of interview and data collection, it is learnt that, Beekeepers obtained training from KVIB (3.9%) and KVIC (57.97). NGO's, (17.68%), training under professional beekeepers accounted to about 20.48%. Interestingly, horticulture department was involved only in distribution of bee boxes and had not done any training camps for the beekeepers during the study period (table -1).

Social and economic conditions of beekeepers: The results obtained on satisfaction level of beekeepers to various parameters revealed interesting aspects on socio-economic conditions of beekeepers. The percentages of beekeepers who are very satisfied were 49.4% and 43.4% were satisfied with the social prestige achieved. 81.9% had very satisfactory job experience; 10.8% had satisfactory experience towards beekeeping; 48.2% were not happy with technical assistance

from other related institutions; creativity in value added products is very low with just about 2.4%; 49.4% were very satisfied; 38.6% were satisfied with their income; 65.1% were not satisfied with loan facility; 44.6% were very satisfied; 36.1% were satisfied with marketing conditions; and 45.8% were very satisfied with cooperation by their spouse table-2.

This study was supported by Kaur² and Kumar and Singh³. According to them 55% and 62.5% of beekeepers faced problems in getting the loans for beekeeping accordingly. In Ludhiana district of Punjab, 40% of beekeepers took loan help from members of their family because of cumbersome loan procedure.

Farrar⁵ had explained the details of economics of colony management. An analysis of the cost items and returns each year will reveal the true cost of production and the profit or loss on the business. An analysis of unit apiary cost is related to their returns based on total business cost and will indicate the opportunities for economic benefit or for increasing management efficiency⁵.

The social and economic audit of beekeeping in Punjab by Chunneja et.al. revealed that 19.34% beekeepers have adopted beekeeping venture on commercial basis with colonies above 100. Annual honey yield per colony and income of the beekeeper increased as the size of the business increased above 100. Above 98 percent of the beekeepers were satisfied with working conditions and economic independence obtained by the adoption of this profession. However, about 65% respondents were not satisfied with loan facilities and 23-39% was not satisfied with marketing of their produce and marketing conditions⁶. The present study agrees with them.

Beekeeping is a low cost supplementary occupation generating employment and income. And inputs like number of hives, frames and human labor play an important role in increasing the honey yield per hive per year⁷. In the present study income by beekeeping as a way of subsidiary source of income has been widely appreciated by the beekeepers. Honey bees increase yield of cross pollinated crops, thus increasing farm income and private employment to the landless and unemployed rural people⁸.

Table-1
Sources of training in Uttara Kannada between May2008-May2011

Sl. No.	Training Institutions	Number of Bee keepers trained					
		Ankola	Honnavar	Sirsi	Siddapur	Total	Percentage
1	KVIC	70	130	250	150	600	57.97%
2	KVIB	00	00	00	40	40	3.86%
3	NGO	19	30	80	54	183	17.68%
4	Trained Bee Keepers	22	26	113	51	212	20.48%
Grand Total						1035	

Table-2
Socio-economic survey of beekeepers of Uttara Kannada

	Level of satisfaction							
	Very Satisfactory		Satisfactory		Not Satisfactory		No idea.	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Social prestige achieved	41	49.4%	36	43.4%	6	7.2%	00	0.0%
Job satisfaction	68	81.9%	9	10.8%	6	7.2%	00	0.0%
Technical assistance from other related institutions	13	15.7%	25	30.1%	40	48.2%	5	6.0%
Creativity in value added products	2	2.4%	1	1.2%	00	00.0%	80	96.4%
Likingness of work by other family members	54	65.1%	27	32.5%	2	2.4%	00	00.0%
Income	41	49.4%	32	38.6%	10	12.0%	00	0.0%
Loan facility	6	7.2%	10	12.0%	54	65.1%	13	15.7%
Marketing conditions	37	44.6%	30	36.1%	15	18.1%	1	1.2%
Cooperation by spouse	30	36.1%	38	45.8%	10	12.0%	5	6.0%

NGOs (Non Governmental Organizations) have taken the initiative to educate rural communities about the benefits of small scale cottage industries like beekeeping, poultry, cattle rearing, and dairying. Sirsi and Yellapurtaluku, for instance, have been the beneficiaries of two such NGO promoted programs⁹. The role of NGO in beekeeping training is appreciated even in the present study.

As suggested by Singh a well-coordinated effort is required at all levels to promote beekeeping in the country as it has proved an effective commercial activity for improving the socio economic status of marginal farmers and non-land holding sections of the society¹⁰. The present study also promotes the need of co-ordinated effort of various factors to promote beekeeping.

Conclusion

The results of the study clearly shows that beekeeping is one of the most respected and satisfied subsidiary profession which can generate significant secondary income to beekeepers. So it is an ideal family business both on a small as well as large scale. There is an urgent need for increasing and expansion of both subsidy and loan to make beekeeping more popular and profitable. There is a tremendous scope for increasing income through value addition of bee products.

Reference

1. Bhat P and Kolatker M. Technical Report No.124. Centre for Ecological Sciences, Indian Institute of Science, Bangalore (2011)
2. Kaur B., Evaluation of selected training courses organized by Punjab Agricultural University, Ludhiana, Ph.D. Thesis, Department of Extension Education, Punjab Agricultural University, Ludhiana (India) (1998)
3. Kumar P and Singh D., Beekeeper's perception of problems of beekeeping, Punjab, *IBJ*, **64(1-2)**, 46-50 (2002)
4. Kumar P. and Sing S., Status of Beekeeping in Ludhiana District of Punjab, *IBJ*, **64(3-4)**, 28-33 (2002)
5. Farrar C.L., Productive management of honey bee colonies, *Am. Bee J.*, **133(4)**, 261-263 (1993 d)
6. Chhuneja P.K. and Gatoria G.S., Potential of beekeeping in Punjab, *Prog.Fmg.*, **27**, 6 (2000)
7. Singh I.J. and Singh U.B., Economic aspects of *Apis mellifera* beekeeping in Haryana, India, *IBJ*, **59(2)**, 88-90 (1997)
8. Goyal N.P. and Jhaji H.S., Establishment of exotic honey bee, *Apis mellifera* Linn. In the Punjab, *IBJ*, **40**, 40-43 (1981)
9. Ramachandra T.V. Subash Chandran M.D., Joshi N.V., Balachandran C., Beekeeping: Sustainable Livelihood Option in Uttara Kannada, Central Western Ghats; ENVIS Technical Report: 49 (2012)
10. Singh G., Present status and future of marketing of Indian Honey in domestic and international market, Proc.Conf.Forest based industries, Pune 40-41 (2008)