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Prospects of apiculture as an enterprise

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Abstract

Agriculture and allied agricultural sectors continue to contribute for national economic development. Recently, apiculture is emerging as one of the lucrative venture, so it is important to focus on diverse honey bee products along with honey production. The research was designed to study the prospects of apiculture as an enterprise. The prospects of apiculture was operationalized as the result of multiple determinants viz. knowledge and skills acquired, self-satisfaction, economic security, employment opportunities, opportunities for entrepreneurship development, scope for export and supportive schemes for enterprising. The present study was conducted purposefully in Mahabaleshwar tehsil of Satara district as the practice of beekeeping is prominent in hilly area of this district. Total 150 respondents from 5 villages viz. Manghar, Dudhgaon, Goroshi, Kharoshi and Parut of Mahabaleshwar tehsil were selected randomly. Data was collected, tabulated and analyzed for the results. Major results of the study revealed that, greater majority (70.67 per cent) of the apiculturists expressed high prospects of apiculture to emerge as reliable, sustainable enterprise. In which, 94.00 per cent agreed that rearing bees enabled them to develop knowledge and skills, 85.33 per cent of the apiculturists agreed that beekeeping provides feeling of self-satisfaction, 96.67 per cent agreed that it provides economic stability by generating additional income and an economically reliable enterprise, 94.67 per cent apiculturists agreed that apiculture is engaging enterprise and provides off-season employment for farmers, 71.33 per cent of the respondents considered apiculture as a lucrative business model for youth, 63.33 per cent apiculturists accepted that bee products has more demand in foreign countries, especially in western countries and 91.33 per cent responding apiculturists agreed that various government schemes help to promote the apiculture as an enterprise. Thus, study can be concluded that apiculture as an enterprise provides potential market for additional income generation, ensuring ecological sustainability and provide livelihood security to the farmers.

Keywords: Apiculture, beekeepers, enterprise, prospects, bee-products

Introduction

Agriculture and allied agricultural sectors viz. dairy, piggy, poultry, fishery, apiculture, sericulture etc. continue to contribute for national economic development. Although the agricultural sector and its allied industries offer significant prospects for rewarding employment, increasing foreign exchange, making livelihood sustainable but its potential needs to exploit completely. Amongst these, recently, apiculture became an imperative part of agriculture. Apiculture or beekeeping is an art and science of rearing, caring and management of honey bees for the production of honey, wax and other bee products. Honey bees provides multiple products, not just a honey but Royal Jelly, Propolis, Pollens, and Bee Venom, Wax etc. This can also be considered as a plus point to expand and diversify this enterprise to produce processed and value added products as per the market demand. In the export markets, there is great competition and importing countries have strict quality requirements regarding aroma, colour, consistency and floral source. By thoroughly understanding the export market, its competition and fulfilling the strict quality requirements regarding aroma, consistency, colour and floral sources, export of such bee products ensures the

greater economic return with creation of particular brand. But apiculture enterprise is not yet fully captivated to drive economic growth and job creation. This throws light on multi-dimensional growth and holistic development of agriculture and allied sector is a need of an hour.

So, focusing on the processing and production of such unconventional and market demanded bee products will be beneficial to beekeepers to generate additional income in a sustainable way and sustainability of this industry is essential for economic wellbeing and development of country. Considering this importance of bee keeping industry it felt necessary to study prospects of apiculture as an enterprise. In present study,

Methodology

Manghar village is recognized nationally as a first 'honey village', as maximum number of farmers are engaged in beekeeping and it is also their main source of livelihood. This village comes under Satara district, therefore Satara district was purposively selected for present study. Considering naturally favorable ecological conditions, Mahabaleshwar tehsil from Satara district was purposively selected for the study. The list of the beekeepers was

obtained from 'Mahabaleshwar Madhotpadak Cooperative Society Ltd. (Madhusagar), Mahabaleshwar' and from the list, 150 respondents were randomly selected for the study comprising total 5 villages viz. Manghar, Dudhgaon, Goroshi, Kharoshi and Parut. The prospects of apiculture was operationalized as the cumulative outcome of several determinants viz. knowledge and skills acquired, self-satisfaction, economic security, employment opportunities, opportunities for entrepreneurship development, scope for export and supportive schemes for enterprising. A structured research inventory was prepared by considering the various determinants of prospects of apiculture on three quantinuum, agree, undecided and disagree. The responses were obtained by personal interview, data was collected, analyzed by using statistical tools viz. percentage and

frequency. The score was assigned in the order of 2, 1 and 0 respectively. Thus the total score for individual respondents was worked out by adding all the score obtained. The respondents were classified into three categories by using tertiles categorization method.

Results and Discussion

An attempt was made to study the prospects of apiculture as an enterprise by considering various determinants viz. Knowledge and Skills, Self-Satisfaction, Economic Security, Employment Opportunities, Opportunities for Entrepreneurship Development, Scope for Export and Supportive Schemes for Enterprising. The data was collected, analyzed to obtain results and presented in detail in Table1.

Table 1: Distribution of apiculturists according to prospects of apiculture as an enterprise (n=150)

Sr. No.	Particulars	Agree	Undecided	Disagree
A	Knowledge and skills acquired			
1	Rearing bees enables to develop knowledge about bee biology and skills for proper management of colonies especially during dearth period.	144 (96.00)	4 (2.67)	2 (1.33)
2	Enterprising enables farmers to acquire technical knowledge about various bee products and skills of extraction and collection.	107 (71.33)	41 (27.33)	2 (1.33)
3	There is great scope for adoption of new knowledge and improve various skills in apiculture.	118 (78.67)	26 (17.33)	6 (4.00)
B	Self-Satisfaction			
4	As an enterprise, apiculture provides feeling of self-satisfaction.	128 (85.33)	22 (14.60)	0 (0.00)
5	Self-interest and willingness plays key role in bee rearing.	100 (66.67)	49 (32.67)	1 (0.67)
6	It enables one to create self-identity.	89 (59.33)	56 (37.33)	5 (3.33)
C	Economic Security			
7	Apiculture is an emerging and economically reliable enterprise.	144 (96.00)	6 (4.00)	0 (0.00)
8	It provides economic stability through additional income generation.	145 (96.67)	5 (3.33)	0 (0.00)
9	Other bee products have greater market potential as compared to honey	64 (42.67)	44 (29.33)	42 (28.00)
10	Value added and processed bee products have more economic return	52 (34.67)	59 (39.33)	39 (26.00)
D	Employment Opportunities			
11	Apiculture is engaging enterprise.	142 (94.67)	8 (5.33)	0 (0.00)
12	Various aspects of bee rearing create multiple job opportunities for rural youth.	55 (36.67)	50 (33.33)	45 (30.00)
13	It provides off-season employment for farmers.	142 (94.67)	8 (5.33)	0 (0.00)
14	It has high potential to generate employment in after-collection, handling and processing of honey	91 (60.67)	56 (37.33)	3 (2.00)
15	It can also act as a feasible employment option for rural women.	92 (61.33)	57 (38.00)	1 (0.67)
E	Opportunities for Entrepreneurship Development			
16	It can be a lucrative business model specially for youths.	107 (71.33)	41 (27.33)	2 (1.33)
17	Innovativeness in bee rearing, modern technology of collection and processing helps to expand enterprise.	90 (60.00)	57 (38.00)	3 (2.00)
18	Market centric attitude of apiculturist helps to develop entrepreneurial personality.	72 (48.00)	59 (39.33)	19 (12.67)
F	Scope for Export			
19	Bee products have huge demand in foreign countries, especially in western countries.	95 (63.33)	46 (30.67)	9 (6.00)
20	Exported products assures higher economic return.	93 (62.00)	48 (32.00)	9 (6.00)
21	Export of products help to create 'brand value' of enterprise.	76	63	11

		(50.67)	(42.00)	(7.33)
G	Supportive Schemes for Enterprising			
22	Various govt. schemes help to promote apiculture enterprise.	13 (91.33)	13 (8.670)	0 (0.000)
23	Schemes helps in multidimensional development of apiculture by providing financial and infrastructural support.	95 (63.33)	54 (36.00)	1 (0.67)

(Figures in parenthesis indicates percentage)

The research findings derived from the Table 1. are revealed as follows:

Knowledge and skills acquired: - Among the all respondents 94.00 per cent agreed that rearing bees enabled them to develop knowledge and skills, 71.33 per cent thinks beekeeping enabled farmers to acquire technical knowledge about various bee products and skills to collect it and 78.67 per cent considered that there is great scope for adoption of new knowledge and improve various skills in apiculture. On an average 82.00 per cent apiculturists agreed to various aspects related to knowledge as a determinant of the prospect. This is supported by the findings of Ghode (2022) ^[5], stated that main opportunities for beekeeping development is in application of advanced technology for collection, and processing of honey.

Self-Satisfaction: Great Majority (85.33 per cent) of the apiculturists agreed that beekeeping provides feeling of self-satisfaction, two third (66.67 per cent) of them expressed that interest and willingness played key role in bee rearing and 59.33 per cent respondents agreed upon that apiculture enabled one to create his/her self-identity. For self-satisfaction, on average 70.44 per cent respondents was agreed to consider it as a determinant of the prospect. Above results shows similarities with the findings of Lal *et al* (2012) ^[7] stated that all the respondents are strongly agreed that beekeeping had a significant role in increasing the economic and social status of rural communities.

Economic Security: - While considering the economic security of the apiculture enterprise, vast majority (96.67 per cent) agreed that it provides economic stability by generating additional income and an economically reliable enterprise, 42.67 per cent respondents accepted that other bee products have superior market value as compared to honey and 39.33 per cent of them were undecided about value added and processed bee products either have more economic return or not. On average 67.50 per cent apiculturists agreed to various aspects of economic security as deciding factor to consider prospects of this enterprise. It shows the similarities with the findings of Syngkon (2017) ^[13] stated that beekeeping is a profitable enterprise.

Employment Opportunities: - As an enterprise, great majority (94.67 per cent) apiculturists agreed that apiculture is engaging enterprise and provides off-season employment for farmers , 36.67 per cent respondents considered that various aspects of bee rearing creates multiple employment opportunities especially for rural youth, 60.67 per cent agreed that apiculture has high potential to generate employment in after-collection, handling and processing and 61.33 per cent accepted that it is a feasible employment option for rural women. Out of total respondents, overall

69.60 per cent considered employment opportunities as a determinant of prospect of apiculture. This is supported by the findings of Ghode (2022) ^[5], stated that beekeeping is a non-physically demanding work; it is also favorable for women and landless youth and Verma *et al* (2018) ^[14] stated bee keeping can be successfully promoted in rural area for creating self-employment among rural youth and practicing farmers.

Opportunities for Entrepreneurship Development: - Majority (71.33 per cent) of the respondents considered apiculture as a lucrative business model for youths, 60.00 per cent acknowledged that innovativeness in bee rearing, modern technology of collection and processing helps to expand the enterprise and 48.00 per cent apiculturist agreed that the market centric attitude of the apiculturist helps to develop entrepreneurial personality. While considering the prospect opportunities for entrepreneurship development, on an average 59.67 per cent agreed to it. This shows similarities with the findings of Syngkon (2017) ^[13] stating Advertising of the product is necessary for the success of the entrepreneurship.

Scope for Export: Export helps to expand an enterprise. So considering the export angle of the apiculture, 63.33 per cent apiculturists accepted that bee products has more demand in foreign countries, especially in western countries, 62.00 per cent of them agreed that exported products gives higher economic return and 50.67 per cent of the beekeepers said that export of various bee products helps to create 'brand value' of enterprise. Average 58.67 per cent apiculturists observed scope for export is one of the determinant of the prospect. This results are in conformity with the findings of Ghode (2022) ^[5].

Supportive Schemes for Enterprising: Every enterprise needs some outside support to flourish and sustain. Out of all, 91.33 per cent responding apiculturists agreed that various government schemes help to promote the apiculture as an enterprise and 63.33 per cent of them considered that such schemes help in multidimensional development of apiculture by providing financial and infrastructural support. On an average, 73.33 per cent apiculturists agreed to supportive schemes for enterprise. This is supported by the finding of Galage (2016) ^[4] that more than 96% of beekeepers get subsidy from government.

The information pertaining to several determinants of apiculture as an enterprise viz., knowledge and skills, self-satisfaction, economic security, employment opportunities, opportunities for entrepreneurship development, scope for export and supportive schemes for enterprising were collected, studied and analyzed. The results regarding overall prospects of apiculture was given in Table 2.

Table 2: Distribution of apiculturists according to overall prospects of apiculture as an enterprise. (n=150)

Sr. No.	Categories	Frequency	Percentage
1	Low (Upto 28)	9	6.00
2	Medium (29 to 35)	35	23.33
3	High (36 and above)	106	70.67
	Total	150	100.00

Data regarding the prospects of apiculture enterprise expressed by apiculturists in the Table 1. shows that, majority (70.67 per cent) apiculturists stated that the beekeeping enterprise has high prospects, followed by medium with 23.33 per cent and low with 6.00 per cent. Above results shows similarities with that of Ghode (2022)^[5] and Verma *et al* (2018)^[14].

Conclusion

The results of present study indicates that apiculture is widely viewed as a valuable and emerging enterprise, offering significant benefits in terms of knowledge acquisition, self-satisfaction, and economic security. Most beekeepers surveyed agreed that the practice of beekeeping enhances technical skills and ensures economic stability via additional earnings and also helps to provide a sense of personal fulfillment and identity. Hence study can be concluded that apiculture is recognized as a reliable source of employment, especially in rural areas, creating opportunities for both youth and women, and also serve as off-season employment for agricultural small and marginal farmers. Further it can be state that that, apiculture possess huge potential to turn as a lucrative business and with innovation in processing and a market-oriented approach it leads to further expansion of enterprise. It is also recognized by beekeepers that government schemes provide essential financial and infrastructural support for enterprise development. Overall, the study highlights the hidden prospects of apiculture to emerge as a sustainable and profitable rural enterprise with opportunities for entrepreneurship and export.

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