

## Impact of Progressive Beekeepers Association of Punjab in Terms of Economic, Personal, Technical and Social Benefits

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### ABSTRACT

*The study aimed to determine the benefits derived by the respondents being a member of the Progressive Beekeepers Association. The present study was carried out in the state of Punjab, India with a sample size of 200 respondents who were members of the Progressive Beekeepers Association. Data were collected from the selected respondents by administering a questionnaire pertaining to the benefits derived from the association. The results of the study revealed that majority of the respondents had derived high technical benefits (66.50%), high personal benefits (59.50%), high social benefits (47.00%) and medium economic benefits (54.00%) from the association. Among the various benefits, personal benefits emerged as the major benefits (mean score=323.86) derived by the respondents from the association followed by social benefits (303.27), technical benefits (273.33) and economic benefits (260.83). Moreover, the results reported that more than half (52.00%) of the respondents had obtained high overall benefits from the association.*

**Key words :** *Impact, economic benefits, Personal benefits, Technical benefits, Social benefits, Progressive beekeepers association.*

Beekeeping has been practiced in India since ancient times mainly for the precious honey stored by the bees in combs. It has been practiced in its simplest form in the rich forest regions along the sub-Himalayan mountain ranges, the Eastern and the Western Ghats. The indigenous oriental honey bee, *Apis cerana*, has been kept in wall niches, clay pots or other receptacles. With the introduction of modern beekeeping into the country, the bees are kept in wooden bee boxes, designed to suit the local bee type. In India beekeeping has been mainly forest based. Several natural plant species provide nectar and pollen to honey bees. Thus, the raw material for production of honey is available free from nature. It is the only enterprise which did not create any problem to the nature, does not require more capital investment and skilled labour (Rao and Rao, 2011).

In India, *A. mellifera*, the high yielding bee species, was successfully introduced by the Punjab Agricultural University in 1962-1964 and was given to the farmers of the Punjab for the first time in 1976. The total hive bee colonies in the country are estimated at 1.9 million with apiary honey production at 37,000 metric tonnes, though total honey production (including from wild honey bees) stands at around 72,000 metric tonnes. According to recent estimates by National Bee Board, India requires 200 million honey bee colonies for maximizing crops pollination. Beekeeping is estimated to have potential to provide employment to 0.15 million people in the State. Punjab also has the credit of having India's largest beekeeper, the largest hive manufacturer, the largest equipment manufacturer, the largest honey trader, the largest honey exporter, the largest honey processing plants manufacturer and exporter in the country. The beekeeping has ushered in 'Sweet Revolution' in the state which is exporting its production to about 46 countries including USA, Germany, UAE, UK, South

Africa etc. (Chhuneja, 2011). Beekeeping is an ideal agro-based enterprise for all sections of farmers whether they are marginal, small or progressive farmers (Bansal et al., 2013). It is also suitable for rural tribals and other weaker sections of human society. This enterprise has minimum land and structural requirement. Initial cost to start this profession is also very nominal and recurring cost is negligible. It is important for self-employment generation and socio-economic upliftment in rural areas (Singh and Singh, 2006).

Considering the potential and also the requirement of bee colonies, large number of marginal farmers, tribals and landless labourers will have to be roped in beekeeping industry as prospective beekeepers. Considering the decentralized nature of the beekeeping industry this is all the more necessary. At least two lakh new beekeepers will have to be created each maintaining about five bee colonies (Phadke, 2008). Taking into account these facts, efforts were made by farmers engaged in beekeeping to formulate their own groups so as to enable them derive benefits such as technical enlightenment, professional interaction with experts, marketing channels exploration and transformation of bee farm and the group promotes beekeeping practices, assisting its members and others interested in bees with their beekeeping problems, providing an opportunity to meet and discuss their problems, encouraging people to take interest in beekeeping and help in efficient marketing of honey bee products. By doing so, farmers will enlarge their social circle and get recognition from the association/other agencies. Farmers groups also helped members from exploitation by money lenders (Singh et al., 2001). Keeping in view the importance and advantages of forming farmers' association, the present investigation was undertaken with the objective to study the socio-economic, personal and

technical impact made by the Progressive Beekeepers Association among its members.

#### METHODOLOGY

The study was conducted in the state of Punjab. The members of the association were categorized into three groups based on the number of meetings attended in a year i.e., those who had attended upto four meetings, four to eight meetings and eight to twelve meetings. A total of 200 members were selected based on the probability proportional to the size in each category according to their attendance in the meetings.

A questionnaire was prepared to determine the economic, personal, technical and social benefits derived by the respondents from the Progressive Beekeepers Association. The questionnaire was pretested on 10 non-sampled members of the association. Data were collected from the selected respondents by using distributed questionnaire approach on the days of monthly meeting of the association in the year 2013. The questionnaires were also mailed to the members who were unable to attend all the meetings.

#### RESULTS AND DISCUSSION

The comprehensive information regarding the various economic benefits derived by the respondents from the association are presented in Table 1. The data revealed that the major economic benefits derived by the respondents being a member of the association

were exploring more efficient marketing channels (score=364), gained in knowledge regarding grading of the products (score=338), branding of the products (score=330) and certification of the products (score=323). It was also found that the respondents received better prices for their produce (score=313), free from cheating from money lenders (score=308), enhanced their savings (score=305), gained knowledge on product packaging (score=285) and input procurement (score=229). Minor economic benefits gained by the respondents included easier accessibility to credit facilities (score=143), provision of subsidy (score=97) and availability of financial benefits from NGOs/private agencies (score=95). Similar findings were reported by Punitha (2002) who asserted that Marthandam Beekeepers Co-operative Society had made a significant improvement in the bee-keeping industry and the economic conditions of the bee-keepers in Kanyakumari by assisting them in grading and certification of their produce with AgMark and marketed all over India in bottles and tins in retail and bulk. This helped them in fetching higher price for their produce.

An annual report of NABARD (2010) stated that 80% of the total SHGs members have accessed financial assistance from banks and about 58% per cent of the members reported increase in assets after becoming a member of the group. Nyang et al.(2007)

**Table 1**  
**Distribution of the respondents based on various aspects of economic benefits** (n=200)

Sl. No.	Economic Benefits	Agree		Partly agree		Disagree		Total score	Rank
		f	%	f	%	f	%		
1.	Receive better prices for produce	121	60.50	71	35.50	8	4.00	313	5
2.	Explore more efficient marketing channels	168	84.00	28	14.00	4	2.00	364	1
3.	Branding of the products	143	71.50	44	22.00	13	6.50	330	3
4.	Packaging of the products	97	48.50	91	45.50	16	8.00	285	8
5.	Grading of the products	157	78.50	24	12.00	19	9.50	338	2
6.	Certification of the products	145	72.50	33	16.50	22	11.00	323	4
7.	Easier accessibility to credit facilities	37	18.50	69	34.50	94	47.00	143	10
8.	Provision of subsidy	28	14.00	41	20.50	131	65.50	97	11
9.	Free from cheating from the money lenders	116	58.00	76	38.00	8	4.00	308	6
10.	Availability of financial benefits from NGOs/private agencies	30	15.00	35	17.50	135	67.50	95	12
11.	Enhanced savings	109	54.50	87	43.50	4	2.00	305	7
12.	Helps in input procurement	71	35.50	87	43.50	42	21.00	229	9

*f* - Frequency % - Percentage

asserted that members of the farmers associations in East Africa have benefited from market oriented production, unlike in subsistence farming, to overcome dis-economies of scale to attract and get better prices through collective marketing. Furthermore, saving practices have been encouraged amongst the group members and credit facilities enhanced. Savings not only help to finance production, but also strengthen bonding and harmony among members, as they try to

safeguard one another's savings. Farmers groups also helped members to free from the clutches of money lenders and save them from exploitation for meager amounts (Singh et al., 2001).

Regarding the technical benefits attained by the respondents, the data indicated that the respondents had learned new skills on beekeeping (score=354), increased their frequency of contact with officials and experts for technical information (score=351) and had

**Table 2**  
**Distribution of the respondents based on various aspects of technical benefits (n=200)**

Sl. No.	Technical benefits	Agree		Partly Agree		Disagree		Total score	Rank
		f	%	f	%	f	%		
1.	Learning new skills	154	77.00	46	23.00	0	0.00	354	1
2.	Improvement in performing task	142	71.00	58	29.00	0	0.00	342	3
3.	Increase contact with officials and experts for technical information	151	75.50	49	24.50	0	0.00	351	2
4.	Knowledge regarding produce certification by competent authority	145	72.50	25	12.50	30	15.00	315	4
5.	Accessibility to latest technology	42	21.00	30	15.00	128	64.00	114	6
6.	Availability of guidance from different agencies	101	50.50	63	31.50	36	18.00	164	5

*f* - Frequency % - Percentage

improvement in performing task (score=342) after becoming a member of the association. The data also revealed that the respondents derived other technical benefits such as gaining knowledge regarding produce certification by competent authority (score=315), availability of guidance from different agencies (score=164) and accessibility to latest technology (score=114) being a member of the association (Table 2).

A study conducted by Geran (1996) on the effect of group formation on rural women's access to services in Western Province, Zambia revealed that

group formation had indeed increased the access to various rural services for group members. Of those 39 groups, 26 said that visits from agricultural extension agents and contacts with experts from different organizations had increased since forming their group which helped them in updating their knowledge and enhanced their skills in performing various activities practiced by them.

A perusal of the data in Table 3 indicated that the respondents had worked harder to achieve their goals (score=351), had security feeling (score=341), improvement in their living standard (score=326) and

**Table 3**  
**Distribution of the respondents based on various aspects of personal benefits (n=200)**

Sl. No.	Personal benefits	Agree		Partly Agree		Disagree		Total score	Rank
		f	%	f	%	f	%		
1.	Security feeling	141	70.50	59	29.50	0	0.00	341	2
2.	Enable to analyze, identify and solve own problems	122	61.00	70	35.00	8	4.00	314	6
3.	Feel empowered	129	64.50	59	29.50	12	6.00	317	4
4.	Take risk for new activities	123	61.50	56	28.00	21	10.50	302	7
5.	Best use of time and resources	133	66.50	50	25.00	12	6.00	316	5
6.	Work harder to achieve goals	151	75.50	49	24.50	0	0.00	351	1
7.	Improvement in the living standard	126	63.00	74	37.00	0	0.00	326	3

*f* - Frequency % - Percentage

feel empowered (score=317) after becoming a member of the association (Table 3). The respondents also reported that being a member of the association enabled them to make best use of time and resources (score=316), analyze, identify and solve their own problems (score=314) and raised their capacity to take risk for new activities (score=302). Bhatia and Bhatia (2000) observed that there had been perceptible changes in the living standards of the SHG's members, in terms of ownership of assets, increase in savings and

borrowing capacity, income generating activities and income levels as well. This had instilled a sense of security among the members, enhanced their risk taking capacity and motivated them to put greater efforts to achieve their goals.

It could be envisaged from the data that major social benefits derived by the respondents being a member of the association included greater interaction with scientists and experts (score=363), desire to seek

**Table 4**  
**Distribution of the respondents based on various aspects of social benefits (n=200)**

Sl. No.	Social Benefits	Agree		Partly Agree		Disagree		Total score	Rank
		f	%	f	%	f	%		
1.	Greater interaction with scientists and experts	163	81.50	37	18.50	21	10.50	363	1
2.	Greater exposure within and outside Punjab	97	48.50	83	41.50	20	10.00	277	9
3.	Enlarge friendship circle	126	63.00	74	37.00	0	0.00	326	4
4.	Interaction with other social organizations	127	63.50	61	30.50	12	6.00	315	5
5.	Socially recognized in the society	108	54.00	80	40.00	12	6.00	296	7
6.	Involve in solving group's problems	128	64.00	72	36.00	0	0.00	328	3
7.	Improvement in social status	109	54.50	65	32.50	26	13.00	283	8
8.	Desire to seek information	131	65.50	69	34.50	0	0.00	331	2
9.	Ability to share knowledge and information	117	58.50	74	37.00	9	4.50	308	6
10.	Capability of leading the group	97	48.50	68	34.00	35	17.50	262	10
11.	Participation in various social activities	63	31.50	121	60.50	16	8.00	247	11

*f* - Frequency % - Percentage

information (score=331), involvement in solving group's problems (score=328), enlarge friendship circle (score=326) and interaction with other social organizations (score=315). Other social benefits attained by the respondents were ability to share knowledge and information (score=308), socially recognized in the society (score=296), improvement in social status (score=283), greater exposure within and outside Punjab (score=277), capability of leading the group (score=262) and participation in various social activities (score=247) (Table 4).

The involvement in the group significantly contributed in improving the self-confidence of the members. The feeling of self-worth and communication with others improved after association with the SHGs (NABARD, 2002). Similar findings were also reported by Kalra et al. (2012) who stated that important benefits of group membership identified by group members were knowledge sharing as a result of increased in determination among members to seek

information from various sources, and empowerment. Other benefits identified were the increased confidence and decision making ability of group members. This empowerment of group members has had an effect on the community as a whole, with signs of increased civic involvement of group members and their ability to take on leadership roles for other community work.

Further analysis of the data regarding the economic benefits derived by the respondents revealed that more than half (54%) of the respondents belonged to medium economic benefits category followed by high economic benefits (35.50%). Only few proportions (10.50%) of the respondents were in low economic benefits category. Regarding technical benefits, majority of the respondents (66.50%) received high technical benefits whereas 23.50 per cent and 10 per cent of the respondents had medium and low technical benefits respectively from the association. A probe into the personal benefits showed that around sixty per cent (59.50%) of the respondents had high

**Table 5**  
**Distribution of the respondents based on their economic, technical, personal and social benefits derived (n=200)**

Sl. No.	Impact / Benefits	Category	f	%
1.	Economic benefits	Low (6-12)	21	10.50
		Medium (12-18)	108	54.00
		High (18-24)	71	35.50
2.	Technical benefits	Low (3-6)	20	10.00
		Medium (6-9)	47	23.50
		High (9-12)	133	66.50
3.	Personal benefits	Low (5-8)	42	21.00
		Medium (8-11)	39	19.50
		High (11-14)	119	59.50
4.	Social benefits	Low (7-12)	43	21.50
		Medium (12-17)	63	31.50
		High (17-22)	94	47.00

personal benefits followed by low (21%) and medium (19.50%) personal benefits. The data also revealed that a major proportion (47.00%) of the respondents belonged to high social benefits category whereas 31.50 % and 21.50% of the respondents fell in the medium and low social benefits category respectively (Table 5).

A probe into the mean score and rank obtained by economic, technical, personal and social benefits are presented in Table 6. The data indicated that among the various benefits derived by the respondents, personal benefits with a mean score of 323.86 emerged

**Table 6**  
**Mean score and rank of economic, technical, personal and social benefits**

Sl. No.	Benefits	Mean score	Rank
1.	Economic benefits	260.83	4
2.	Technical benefits	273.33	3
3.	Personal benefits	323.86	1
4.	Social benefits	303.27	2

as the major benefits derived by the respondents from the association. It was followed by social benefits (mean score=303.27), technical benefits (mean score=273.33) and economic benefits (mean score=260.83).

The results of the study had a close resemblance with the findings of Singh et al. (2011). It was learnt from the investigation that the members in the farmers groups under the study were hoping to generate additional income and make savings in order to enhance the economic condition of their families. They explained that the economic benefits, personal interest and psychological benefits (satisfaction due to increased status in the family or community) that they have received were the key factors in the sustainable management of their enterprises. According to hierarchy of needs theory (Maslow 1943), human

behavior is related to his needs and it is adjusted as per the nature of needs to be satisfied. In hierarchy of needs theory, Maslow identified five types/sets of human need arranged in a hierarchy of their importance and priority. He concluded that when one set of needs is satisfied, it ceases to be a motivating factor. Thereafter, the next set of needs in the hierarchy order takes its place. Similarly, the results of the study also showed that the members of the association also accessed the highest benefits in the personal aspects followed by social benefits, technical benefits and economic benefits from the association.

**Table 7**  
**Distribution of the respondents based on the overall benefits attained by them**

Sl. No.	Category	Frequency	Percentage
1.	Low (26-41)	20	10.00
2.	Medium (41-56)	76	38.00
3.	High (56-72)	104	52.00

Further analysis of the data related to the overall benefits derived by the respondents showed that a little more than fifty per cent (52%) of the respondents had attained high overall benefits from the association. The data also revealed that while more than one-third (38%) of the respondents had attained medium overall benefits, only 10% of the respondents were found to obtain low overall benefits from the association (Table 7).

**CONCLUSION**

The study highlighted that majority of the respondents had obtained high technical benefits, high personal benefits, high social benefits and medium economic benefits being a member of the association. Among the various benefits, personal benefits emerged as the major benefits derived by the respondents followed by social benefits, technical benefits and economic benefits. It may be due to the reason that a person has to satisfy his personal and social needs before pursuing for other needs/aims. Regarding the overall benefits, majority of the respondents were found to acquire high overall benefits from the association. Thus, it could be concluded from the findings of the study that the association had made a significant impact in terms of personal, technical, social and economic benefits on its members. To sustain all these benefits depend largely upon the leadership taken by the representatives of the association to explore innovative strategies for effective performance of the association. The study recommended greater involvement of government and private agencies, voluntary organizations and financial institutions in the activities of the association to enhance the economic benefits of the members. The example of the successful working model of this association will be applicable to other farmers groups in different parts of the country.

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