

CHAPTER 8: CONCLUSION AND SUGGESTIONS

8.1: CONCLUSION

It is true that there are only seven co-operative societies in West Bengal operating with apiculture products (mainly honey). But there is immense scope to increase the number of co-operative societies for marketing of honey in this state. This will not only help to trigger off the marketing of honey in the state but also initiate the local people of this area to come to the beekeeping profession. The beekeepers also get interest to communicate themselves with the co-operative societies because of reasonable price received by them for their honey from the co-operative societies. Now the existing seven co-operative societies namely 24 Parganas Beekeepers' Co-operative Society Ltd., Baruipur Apiculture Industrial Co-operative Society Ltd., Midnapore Beekeepers' Khadi & Village Industries Co-operative Society Ltd., Bishnupur Subdivision Beekeepers' Women Cooperative Society Ltd., Solo Mile Moumachhipalan Shilpa Samabaya Samity Ltd., Malda Bee-Keeping and Honey Processing Industrial Cluster Co-operative Society Ltd. and Jalpaiguri District Bee Keepers Co-operatives Society Ltd are also contributing towards the economic development of the state by creating some employment opportunities, making business environment, meeting the demand for honey to some extent in the local and outside market, investing capital on this project, generating revenues and creating condition for improvement of trading in honey.

Seven co-operative societies of West Bengal suffer from a number of problems. For this, the co-operative societies are not in a position to boost up their selling and buying operations. There are some common problems of co-operative societies of West Bengal, which are major hindrances to marketing of honey activities. These problems have been identified during the analysis of different models in different chapters respectively of this thesis. In addition to these a few specific problems have also been found during the interpretation. The problems may be precisely mentioned as under:

- Very minimum number of members and apiculture cooperative societies in West Bengal
- The apiculture activities still remain unorganised.
- High operating costs.
- Lack of consistency.
- Paucity of capital
- Middlemen's disservices.
- Lack of scientific management
- Illiteracy of the members.
- Lack of training

- Lack of publicity, sales promotion etc.
- Lack of communication.
- Lack of sufficient opportunity for standardization and gradation of honey.
- Lack of storage facilities.
- Lack of correlation between beekeepers and co-operative societies.
- Lack of security of the poor beekeepers in the various fields of West Bengal.
- Lack of procedure to market the processed honey, especially in retail marketing.
- Much dependence on external market.
- Minimum number of apiculture co-operative societies within the state.
- Maximum numbers of beekeepers are not registered with the cooperative societies and National Bee Board.
- The apiculture cooperative societies of the state cannot maintain the standard norm of ratios like Absolute Liquid Ratio, Working Capital Ratio, Debt Equity Ratio and Proprietary Ratio.
- Lack of information regarding 'bee pasturage', 'honey flow periods', 'major honey flow period', 'minor honey flow period', 'migration map' and 'dearth periods'.
- Lack of support services.
- Low productivity per bee-colony.
- Maximum number of beekeepers has long 'dearth periods'.
- No knowledge about appropriate collection procedure of organic honey and pesticide free honey.
- Lack of product differentiation by origin and by quality.
- Few apiculture cooperative societies in West Bengal are in a state of defunct.
- Lack of knowledge about pollination service among the general people especially among the farmers and farm owners.
- Lack of initiative about keeping of native bees, Apis Cerana.
- Lack of knowledge about modern bee keeping of the Mouley community.
- Lack of social security system for beekeepers especially women beekeepers for moving their bee colonies freely in different fields of West Bengal.
- Lack of knowledge about production and marketing of various by-products of apiculture industry like pollen and royal jelly.

8.2: SUGGESTIONS

The followings steps are required to be taken by the co-operative societies in West Bengal along with the assistance of different sectors like bureaucrats, producer-beekeepers, Government, bankers etc. to improve the marketing and production of honey. This can also assist to contribute towards the development of state economy in a meaningful way.

Following steps to be taken:

- All apiculture related institutions should be brought under one umbrella for the development of apiculture industry by the Government. Extensive research based survey is required to collect data relating to apiculture activities in India as well as in West Bengal.
- India has to concentrate its honey exports to some prospective honey importing Asian countries like Thailand, Indonesia, Viet Nam, Japan and so on.
- Apiculture cooperative societies have to increase the collection of honey from the site of the apiaries so that they do not have to wait for the beekeepers for collection of honey at the doors of societies.
- Cooperative societies' registered beekeeper members are not sufficient in number. There is enough possibility to increase the number of members. Interests of all beekeepers have to be developed for registration as a member of co-operative society.
- Correlation between beekeepers and co-operative societies has to be developed so that they can know that the societies are not for the employees but for the beekeepers.
- Financial supports have to be provided for the beekeepers so that, they cannot be destined by the middlemen.
- Transport facilities have to be provided by the societies for the beekeepers, which are now provided by the middlemen for their vested interest.
- Cooperative society has to come forward and support the beekeepers immediately when any problem arises.
- Governmental rules and regulations, legislative act if necessary may be made for protection and security of the poor beekeepers.
- Awareness programmes have to be conducted to publicize that raw honey is not so good. To make the honey good in quality it requires some processing.
- The apiculture cooperative societies also purchase honey from middlemen. It should be stopped.

- Policies and laws may be enforced to control the middlemen and money-lenders from their exploitative attitude towards the poor beekeepers.
- Literacy programmes have to be conducted by NGOs, government, local authorities for beekeepers so that they can know their loopholes.
- It is unfortunate for the state beekeepers that they have to pay some amount of their investment to the land-owners, farmers, local clubs or such bodies for doing their apiculture activities. Awareness campaigns should be arranged to remove the harassments.
- It is not possible for an apiculture cooperative society to spend huge amount of money for processing, storing, grading, packaging, selling & distributing and even advertising. Government should take part in it. All cooperative societies can merge themselves into a single central apiculture cooperative society to avail the benefit of large scale economies.
- All Apiculture cooperative societies have to concentrate on marketing of processed honey, especially in retail marketing.
- Only Baruipur Apiculture Industrial Co-operative Society Ltd. introduces honey packet of 50 grams. All Apiculture cooperative societies should introduce it. Packaging has to be made attractive and very small quantity sachet of honey has to be introduced in market.
- Awareness programme, advertisement, government initiatives are very much required to be implemented for popularizing cooperative societies' honey, so that people can feel apiculture cooperative societies' honey is not only at par with other popular brands of honey, but is better than those branded honeys.
- The apiculture co-operative societies have to remove those weaknesses, which are identified in SWOT analysis so that they can improve their strength, remove threats and catch the market opportunities by removing threats. The removals of Threats and weaknesses are the suggestive measures to be adopted by these cooperative societies in order to maintain and improve their strengths.
- Seminar, Symposium, workshop have to be conducted to improve the knowledge of apiculturists, beekeepers in the relevant aspects of foreign commerce, quality of product and their sampling and analysis.

- Policies are required to develop both internal and external market. Much dependence on external market has to be contracted because there is huge scope to develop intra district, intra and interstate markets.
- Government has to implement some commercial strategies of the apiculture industry to promote the product abroad or generate new markets.
- Entrepreneurships can be developed to supply value added products and for insufficient development of differentiated products. Products differentiation by origin and quality has to be implemented.
- Strong measures should be enacted to protect unfair competition in the internal market (adulteration, retail sells without registration or controls, sells by saying “home hive” on roadsides and other places without sanitary and price controls).
- More entrepreneurship can be developed to increase the number of apiculture co-operative societies within the state.
- Activities may be initiated to convince the beekeepers for registering their name as members of co-operative societies and National Bee Board.
- Assistances are required to train the general people for beekeeping by various government departments.
- Steps have to be taken to improve the marketing strategies-- especially retail out letting.
- Relationship between the cooperative societies and the beekeepers must be developed by arranging problem solving meeting and discussions time to time. The field support system must also be strengthened by adopting continuous supervision.
- Standard processing unit has to be installed to ensure the quality of honey.
- Regular maintenance of books of accounts is needed to show the true financial picture.
- Impetus for migratory beekeeping is needed by the beekeepers which can be arranged by the government and NGOs willingly to participate in apiculture activities.
- Introduction of ‘Agmark’ is needed by all apiculture cooperative societies of West Bengal to create favourable impact on the customers about the quality of honey.
- Subsidy has to be provided from government level to those beekeepers especially who are keeping Apis Cerana.
- Seminar, Awareness camp, workshop have to be organised to promote necessity of beekeeping in agriculture. Government, NGOs and others have to shake their hands with the cooperative societies in this matter.

- Cluster of 50 colonies or more by assembling poor beekeepers having below 50 colonies each are needed.
- Required financial supports should be provided to the beekeepers and Mouleys by the government directly or through the apiculture cooperative societies.
- Establish self help groups for beekeeping.
- Provide bee box to the poor people, students, farmers and others.
- Sales promotional services have to be developed by the cooperative societies.
- Apiculture cooperative societies of West Bengal have to reduce their cost of goods sold and operating expenses and at the same time have to increase the sales volume of their products.
- The society should concentrate on retail marketing which may give high return.
- The apiculture cooperative societies should increase the velocity of sales turnover and reduce overstocking.
- Improve the efficiency of the management in manufacturing, selling, administrative and other activities of the societies.
- Policy should be adopted to enhance the market especially retail market.
- The apiculture cooperative societies should reduce long term liabilities and balance them with Shareholders' Fund.
- The management of the apiculture cooperative societies should Control and utilise idle current assets.
- The apiculture cooperative societies have to value the stock in consistent and appropriate manner.
- The management of the apiculture cooperative societies should control and utilise idle inventory.
- Government has to extend financial assistances to the co-operative societies. Government should provide fund like grants and subsidies for smooth running of these apiculture cooperative societies.
- The management of the apiculture cooperative societies Control and utilise idle funds.
- Proper financial policies should be introduced to maintain the standard norm of ratios like Absolute Liquid Ratio, Working Capital Ratio, Debt Equity Ratio and Proprietary Ratio.

- Government should provide fund like grants and subsidies for smooth running of these apiculture cooperative societies especially for Baruipur Apiculture Industrial Co-Operative Society Ltd (BAICSL).
- The management of the apiculture cooperative societies should control and utilise idle cash and bank balance.
- Current liabilities should be utilised in Current assets by the management of the apiculture cooperative societies.
- The management of the apiculture cooperative societies should control and utilise idle working capital in inventory.
- The societies should increase sales turnover ratio. Policy has to be taken to roll the finished goods many times in a year.
- Steps have to be taken to reduce debit balance of profit and loss account.
- Long term debt should be increased to enhance the debt equity ratio and to decrease the proprietary ratio of the societies.
- Steps have to be taken to collect more long term loan from outsiders by the management of the apiculture cooperative societies.
- Cost of capital should be considered during financing by the management of the apiculture cooperative societies.
- To decrease the proprietary ratio the societies have to increase the long term debt.
- Fixed assets should be installed by taking long term loan from outside along with own funds by the apiculture cooperative societies of West Bengal.
- Proper financial policies should be introduced by the societies to run atleast with evenly geared situation.
- Baruipur Apiculture Industrial Co-Operative Society Ltd has to reduce long term loan.
- The Malda Bee-Keeping and Honey Processing Industrial Cluster Co-operative Society Ltd. (MBHPICCSL) has performed very well in sales but has to reduce its operating cost. Similarly inventory turnover ratios of MBHPICCSL are very good, but should increase working capital turnover ratio to earn more profit.
- Have to identify ‘bee pasturage’, ‘honey flow periods’, ‘major honey flow period’, ‘minor honey flow period’ and ‘dearth periods’ with the help of experts. This information collected by the experts has to be supplied to all apiculture cooperative societies of West Bengal. Simultaneously apiculture cooperative societies of West Bengal must provide the information to the beekeepers as soon as possible.

- Apiculture cooperative societies of West Bengal should provide other support services by following this information.
- All apiculture cooperative societies of West Bengal have to take initiative to increase the number of members.
- State Government should establish a separate department to keep record and information and to provide facilities to improve the apiculture industry.
- Training camp and Awareness programmes have to be organised more to induce the general people in accepting the apiculture profession.
- More honey bee floras have to be identified by the Government of West Bengal.
- New floras which are identified by a few beekeepers in West Bengal should be given them recognition.
- A migration map should be prepared by every apiculture cooperative societies of West Bengal.
- All beekeepers must try to increase their migration period so that feeding period of bees can be reduced.
- Per colony productivity has to be improved by interaction of knowledge between strong beekeepers and weak beekeepers.
- Have to make cluster among all the beekeepers of a region with the active initiations of apiculture cooperative society of West Bengal and State Government.
- Have to collect more organic honey and pesticide free honey.
- Making of apiculture cooperative society in both Dinajpur Districts of West Bengal is essential.
- Awareness programmes have to be conducted to increase organic and pesticide free farming among the farmers of West Bengal.
- Measures have to be taken to improve sales through Baruipur Apiculture Industrial Co-Operative Society Ltd and Solo Mile Moumachi Palan Silpa Samabay Samity Ltd (they are comparatively better in selling of honey).
- Existing retail marketing policies have to be changed to improve sales.
- Mono floral honey which is collected from the field of West Bengal by the beekeepers should be maintained and sold separately by the apiculture cooperative societies of West Bengal for getting higher price.
- Consistent pricing policies should be adopted to compete with popular brands.

- One single brand of honey has to be created by all apiculture cooperative societies to make a brand image of honey in the state.
- To fight with all popular brands financing in selling and distribution are major problems. It is the time to create a central cooperative society under which a single brand may be popularised which can fight with the popular brands of other giant companies.
- Most of people do not know the information about the honey of apiculture cooperative societies of West Bengal. Special measures should be taken by the government and non government agencies to popularize this honey.
- All apiculture cooperative societies of West Bengal must try to arrange for supervision of retail shops with the intention to improve honey marketing.
- There is huge scope of marketing of honey used for religious purposes. Apiculture cooperative societies have to take steps to improve this marketing.
- Awareness programmes have to be organised by the apiculture cooperative societies and different Government organisations or departments and non government agencies to increase the importance of honey among the general people.
- Special efforts have to be taken to induce the general people, especially marginal and small farmers, bargadars, houseless people, partially disabled people to accept apiculture as their livelihoods in West Bengal mainly in South 24 Parganas district and North Dinajpur Districts.
- Steps have to be taken to revive apiculture cooperative societies in West Bengal for those who are in a state of defunct.
- Special Awareness and motivating camps as well as beekeeping training programmes and bee-keeping projects have to be introduced at school level.
- Special Awareness programme have to be conducted to popularise pollination service among the general people especially among the farmers and farm owners.
- Government, forest department, non government organisation, apiculture cooperative societies have to take action immediately whenever the beekeepers face any obstruction to keep their colonies in the fields.
- Government should take initiative to flourish the keeping of native bees, Apis Cerana.
- Special Awareness programme have to be conducted by the government, forest department, non government organisations, apiculture cooperative societies to maintain these indigenous bees which are suitable for Indian climate, keeping in the mind that

these bees have potential to increase productivity of native crops and to maintain the biodiversity of the State as well as the country.

- Special package like subsidised loans, free equipment facilities, free transport facilities have to be declared by the government for the beekeepers who keep these indigenous bees, Apis Cerana.
- Marketing of honey of native bees should be undertaken by the government so that its price can increase.
- Since size of Apis Cerana Indica is small, it visits all flowers. Hence, honey of native bees is multi-floral of indigenous flora and good in quality. But its price remains same like the price of Apis Mellifera. Huge and attractive advertisement is needed to increase the price and sales of this honey.
- Training is needed for modern bee keeping for the Mouley community.
- Loan and incentives have to be given to Mouley for modern beekeeping.
- The Mouleys have to be registered as members of a co-operative society.
- Formation of Self-Help-Groups or Co-operatives have to be made for accepting both Mouley and beekeeping profession.
- Special measures have to be taken for producing residue free honey.
- Environmental Awareness programme has to be organised by government, non government organisation and cooperative societies to protect environment from pollution.
- General people can also practice Integrated Pest Management (IPM) where they live, work, and play to protect environment from pollution.
- Integrated Pest Management (IPM) techniques have to be introduced to minimize the redundant use of pesticides by promoting beneficial insects to kill pests, disrupting pest's habitat and using least-toxic products whenever needed by the farmers and beekeepers.
- Awareness programmes are needed to introduce and increase organic agriculture in West Bengal.
- Forest honey is organic. So segregation is necessary for forest honey from other honey to make it popularised in the market.
- Develop relationship between farmers and beekeepers so that agriculture may become chemical free and more bees' dependent as pollinators.

- Pollution control board has to enhance their scope and areas so that nectar and pollen may remain free from pollution evolved from industries, motor vehicles etc.
- Cooperative societies, government as well as non government organisation have to conduct Awareness camp about site selection of apiaries where, for a radius of atleast three kilometres around an apiary, nectar and pollen sources must be essentially either organic or wild/uncultivated. This area must maintain such distance (three kilometres radius) from significant sources of pollution from roads, industry or urban centres or airports.
- Cooperative societies, government as well as non government organisation have to conduct Awareness camp about construction of hive, foundation and comb, which must be of natural, untreated materials.
- Training should be provided to the beekeepers regarding feeding of bees, which must be with organic honey or organic sugar and medicinal treatment on bees, which must be under homeopathic, herbal and natural treatments.
- Government have to strengthen the social security system so that beekeepers especially women beekeepers can move their bee colonies freely in different fields of West Bengal.
- More subsidies have to be given to women for accepting beekeeping profession.
- Awareness programme have to be organised by the government and non government organisation for promoting apiculture and removing the harassment in the fields.
- Beekeepers or a single cooperative society has no such ability to popularise the by-products of apiculture. Hence, Government and non government organisations must come forward to popularise these by-products.
- Training has to be given to the beekeepers to produce these by-products and government as well as other non government organisations can provide these training.
- By-products like pollen and royal jelly have good export values. Hence government has to take initiatives to market these products.
- Advertisement is needed through mass media. A single apiculture cooperative society cannot afford to do this. Hence, apiculture cooperative societies all together have to take steps in this matter and this must be supported by the government and non government organizations.

It is believed that if the suggested measures are accepted by different sections like bureaucrats, producers/beekeeper, government, common people and bankers, this state may

produce unique result in respect of apiculture along with its marketing activities for the benefit of its people. This study attempts within its limited scope to present an integrated and comprehensive analysis of “Marketing of Apiculture Industry in West Bengal through co-operative society”. Just one study cannot be sufficient to fill all the gaps in our knowledge about the “Marketing of Apiculture Industry in West Bengal through co-operative society”. It constitutes an important element in the rural economy in spite of the various problems faced by the apiculture activities in recent times.

At the same time, it faces a number of problems; justice will be done to it, if only further research to examine its other dimensions is carried on. The present work hints at the field that requires further in-depth treatment. Some aspect of the apiculture of the state covered in the present study may provide basis for further research. In conclusion, the apiculture faces multidimensional problems and play crucial role in the economy of the rural areas of this region. The solution of this problem may help to develop the economy of West Bengal with its 68.13% rural population in a meaningful way.