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Problems and Prospects of Horticulture Crops in Mangalore Taluk, Karnataka: A Study

[1]K. N. Amarendra, [2]Shekhar Angadi

[1]*Associate Professor, Dept of Geography, Sree Siddaganaga College of arts and commerce Nelamangala-562123*

[2]*Lecturer, Dept of Geography, University College Mangalore-575001*

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ABSTRACT: Horticulture is tremendous industry composed of numerous commercial enterprises. Lot of raw material can be produced from horticultural crops. It contributes to health happiness and prosperity of the mankind. Horticulture is the applied science. It is defined as an expensive art and science of study of garden plants. This term applied first in 17th century. The word 'Hortus' means 'Garden' and 'Culture' means 'Cultivation'. The cultivation of flowers, fruit, vegetables in small plots using intensive methods of farming, the most intensive form of horticulture is probably the cultivation of crops (Smith, 1979). A survey base study was conducted to understand the knowledge level of horticulture growers and link to productivity based geographical conditions. In this study, it is tried to provide an idea about prospects of horticulture crops and remedies to improve the production of horticulture crops in the study region.

KEYWORDS: Horticulture, Problems, Prospects, Remedies

I. INTRODUCTION

Horticulture is a branch of agriculture. It includes cultivation of herbs, sprouts, mushrooms, algae, fruits, vegetables, nuts, seeds, flowers, seaweeds and non-food crops such as ornamental trees and plants. It also includes landscape restoration, plant conservation, landscape and garden design, Horticulturists used their knowledge to grow plants for human food and for personal or social needs. Their work includes plant propagation and cultivation with aim of improving plant, yields, quality, nutritional value, growth and resistance to insects, diseases, and environmental stresses. They work as growers, therapists, gardener's designers, and advisors in the field of horticulture. India is the seventh largest country in the world with a total geographical area of 328.73 m ha and has second largest population 121 crores (2011), after China. The total arable land available is 144 million hectares of which 70% is under rainfed cultivation. Around 55-60% of the total population depends on agriculture and allied activities. Horticulture crops constitute a significant portion of total agricultural production in the country. The term horticulture is derived from two Latin words HORTUS meaning "GARDEN" and cultura meaning "cultivation". In ancient days the gardens had protected enclosures with high walls or similar structures surrounding the houses. The enclosed places were used to grow fruit, vegetables, flowers and ornamental plants. Therefore, in original sense "Horticulture refers to cultivation of garden plants within protected enclosures".

Horticultural marketing is an important economic activity. Besides contributing to higher productivity and production, it influences the income of growers and contributions to the development of a horticultural economy. It opens up an efficient market system, marketing horticulture a reliable source of income. Simultaneously, horticultural marketing ensures the availability of produce a reasonable price to consumers. However, the perishable nature of certain horticultural commodities like fruit and vegetables introduces an element of risk and uncertainty in the economy. Here, growers have no option but to bring the produce to the market as soon as it is harvested. As a consequence, seasonal glut and corresponding low prices are a common phenomenon during the immediate post-harvest period. The production and supply of fruits and vegetables is differently linked to soil, climate and season. The produce is, therefore, localized. Since the areas of consumption are largely concentrated

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in cities and towns, the goods have to be transported over long and short distances.Further, due to detective methods of picking, packing and transportation, a large proportion of fruits and vegetables deteriorate in transit. The extent of spoilage as sometimes as high as 5 to 50 percent (Horticultural marketing series No. 149.1995) all these aspects introduce certain special elements in the marketing of horticultural crops. This makes the study of horticultural crops especially in relation to its marketing; a pertinent one Maharashtra is one of the leading states in the country in Horticulture Development. The diverse agro-climatic conditions of the state are very congenial for cultivation of various horticultural crops. The area under fruit crops which was 2.42 lakh heaters in 1990 has gone up to 6.13 lakh heaters in 2011. Similarly, the area under various vegetables, spice crops and floriculture has also increased substantially. This is mainly due to the govt. policies like establishment of separate department of horticulture in 1981 and linking horticulture development with "Employment Guarantee Scheme" in 1990. Creation of various infrastructure facilities like establishment of horticulture nurseries, irrigation facilities also helped for horticulture development. With the expansion of area under horticulture, production of fruits hasincreased substantially.However, the marketing of fruits could not beorganized simultaneously. At present markets are dominated by middlemen and they decide the prices of fruits. Unless the farmers form co-operative and open their sale outlets in urban areas, the exploitation from middlemen would not be reduced. The farmers in some areas have organized themselves and formed fruit producer's co-operatives. The merchants do not have knowledge of handling of produce Transportation is more oriented towards quantitative basis rather than qualitative basis. Timely availability of the transport is a matter of concern e.g. Jalgaon district is well known for banana cultivation. Wagon loads of bananas are transported to North India every day from Jalgaon. However, since the railway wagons are not specially designed for transport of fruits, great losses are incurred during April to June which are months of severe heat. Due to lack of cold chain, considerable losses are incurred in fruits and vegetables. Cold chains have been established in some limited areas of grapes. This has helped to increase shelf life, storage, transport and export of grapes. Due to lack of processing facilities, great losses occur in fruits and vegetables.

II. STUDY AREA

Mangalore, officially known as Mangalore, is the chief port city of the Indian state of Karnataka. It is located about 352 km (219 mi) west of the state capital, Bangalore, between the Arabian Sea and the Western Ghats mountain range. The population of the urban agglomeration was 623,841, according to the provisional results of the 2011 national census of India. Mangalore is located at 12.87°N 74.88°E in the Dakshina Kannada district of Karnataka. It has an average elevation of 22 m (72 ft) above mean sea level. It is the administrative headquarters of the Dakshina Kannada district, the largest urban coastal centre of Karnataka. Mangalore is situated on the west coast of India, and is bounded by the Arabian Sea to its west and the Western Ghats to its east. Mangalore city, as a municipal entity, spans an area of 132.45 km² (51.14 sq mi). Mangalore experiences moderate to gusty winds during day time and gentle winds at night. The topography of the city is plain up to 30 km (18.64 mi) inside the coast, and changes to undulating hilly terrain sharply towards the east in Western Ghats. The geology of the city is characterized by hard laterite in hilly tracts and sandy soil along the seashore. The Geological Survey of India has identified Mangalore as a moderately earthquake-prone urban centre and categorised the city in the Seismic III Zone.

III. OBJECTIVES

1. To find out the problems of horticulture crops in the study area
2.To find out the prospects of horticulture crops in the study area
3. To find out the remedies to developed of horticulture crops in the study area.

IV.METHODOLOGY

The present study is based on primary and secondary data collected from department of agriculture Mangalore district statistical office, socio-economic reviews of Dakshina Kannada district, district census hand book (2011).etc. and also referred to and collected relevant information. The taluk is considered as a real unit for investigation and analysis the study area. Secondary data is used for this study apart from primary data's and field observations are carried out in this selected agriculture field in the study area.

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V. DISCUSSION

Horticultures Problems in Mangalore Taluk

Problem of finance:

It is one of the major problems faced by the growers or farmers of Mangalore. It is observed that the finance is the main factor which decides the ability to take up horticulture farming as their occupation. On the other hand the existing farmers too face the same problem of lack of finance led to difficulties in procurement of more seeds/plants, payment of wage to labour, maintenance of farm, development of land for cultivation etc. if the farmers invest their capital in small amount in near future, they will not have finance for further expansion and other purposes, it's the prima-fiche that maximum of grower are going through.

Problem of Marketing:

Most of the farmers in the city have faced the problem of marketing of their horticultural products. The growers of horticulture crops basically find it very hard to sell off their produce to the ultimate customers and as a result sell it to the traders that with unwillingly. Due to absence of a proper marketing policy and channel to assist the farmers of the city, the productivity of the study is being affected. The marketing problems arises mainly due to pricing method of product, lack of buyer, non-branding of products, distribution channel etc. Therefore, the marketing of horticulture produce lack the modern technique of selling off the products in a systematized way.

Problem of labour:

Another main constraint in the cultivation of horticulture farm is non availability of labour in the study area. As response by the respondents that due to the shortage of labour in the area, it's very hard to take care of horticulture crops during the period of pre and post-harvesting. The area, production and productivity of horticultural crops are totally depending on the work force of the farmers or growers. The majority of farmers are not in a position to employ labour in their field due to non- availability of labour.

Problem of storage:

The horticulture crops after post-harvesting have to be store in some preservative and safe place from spoilage and sold them at a high profit margin. In the case of horticulture crops such as orange and pineapple the growers sell it to the traders or buyers from the plant only. The majority of farmers stated that they do used only traditional way of storing their horticulture produce. Therefore, it can be said that maximum of farmers are unaware of the modern method of storing and need of cold storage in their district. It was reported by 15% of sample farmers that though they are in a position to increase their product in a year after year but storage is the problem to keep them properly.

Problem of Education:

Education plays an important role in every walk of life for an individual. Lack of education among the sample beneficiaries is one of the problems of study area. Due to this the farmers are not in position to know more about the horticulture sector in the study area. Thus, as a result the farmers are not approaching the horticulture department with regard to any kind of support and help for their horticulture farm. So, in addition to this the lacks of education make the farmers less respond to modern technologies and other advancement which are required for proper development of horticulture sector. Therefore, to equip the farmers with all this modern techniques and technology, proper training and motivational campaigns should be provided from the side of state and central Government.

Problem of maintenance

The growers or farmers of horticulture crops in the study area find it hard to maintain their farm such as boundary fence, medicine to the plants, cleaning up of unwanted plants and grasses etc. The proper and systematic looking after the horticulture crops will yield huge return in term of production, productivity and income of farmers of the study area. Therefore, the Government should provide aid to farmers the required pesticides to kill all the insects and other so that production can be maintained.

Problem of Know-How

Know-How means the process and procedure of cultivation of horticulture crops. It is almost found that some of the grower's don not have the idea and knowledge of planting the plants or nurseries in a systematic way, medication of plants etc., which as a result hamper in the productivity of horticultural crops. Sometimes, due to lack of knowledge of farming the plant get spoiled or die up for the cause of not planting as per required method. Therefore, it's a very serious problem in the part of grower to take adequate care to have the knowledge of firsthand information on the method and techniques for planting of horticultural crops.

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Problem of technology

In today's modern world, technology plays a major role in growth and development of all sectors of a nation. The farmer of the study area is facing these problems because they are unaware or not in a position to used the latest modern technology. It was found that majority of farmers are using traditional way of cultivation in their farm which as a result create obstacle in the progress of growth and development. In order to compete or increase the scale of area, production and can be better facilitated through the currently-functioning regional and global economic cooperation. Horticulture is a boon of nature which is refined by human skill as a science to obtain more and more benefits. It involves rigorous cropping expertise, including the improvement, production, distribution and use of vegetables, fruits, woody landscape and greenhouse plants. Horticulture is now one of the fastest growing industries with striking professional opportunities. An increasing proportion of the world's population is living in metropolitan environments where their understanding of farming, and therefore of food production, is becoming progressively poorer. While in 1950 approximately 71% of the world's population lived in rural locations, this had declined to 50% in 2011 and is anticipated to be as low as 30% globally by 2050. Ironically however, these same urban-based consumers have become increasing verbal about various issues such as use of pesticides, labour conditions for farm workers, carbon taxes, buy-local campaigns, and the sustainability of production methods. These are often driven as "matters of ethics" and are in isolation from the reality of current production methods or of the opportunity to realistically meet these consumer demands. To meet the steadily rising requirements of low-cost, year-round supply of premium quality fruit and vegetables especially in developing countries, production of fresh vegetables for export has grown rapidly in a number of countries around the world over the last decade. This trade brings producers and exporters of world together with importers and retailers. Usually, urbanization is also impacting considerably on the availability of labour for farming activities. The general unavailability of low-cost labour and the increasing cost of land have seen a turn down in horticultural production in many developed countries around the world. As a result, production has shifted to countries where land and labour permit cost-competitiveness, for instance Kenya. In many countries large scale production of agronomic crops through genetic manipulation is being extensively used. However, in same countries, production of horticultural crops by genetic manipulations is of great concern and a matter of debates regarding the safety and the wider justification of GMOs. The lack of consciousness about the role that conventional plant breeding plays in the production of new cultivators and the uncertainty that often prevails between conventional breeding and plants produced using gene transfer technologies is a matter of concern regarding horticulture practices.

Current development remedies and future prospects in horticulture

Current trends indicate that consumers are looking for increased variety, freshness, and healthy options in their eating choices. They are also seeking greater ease and a higher proportion of fresh produce in their diets. Those in metropolitan environments are more and more aware of and dependent on green spaces for their livelihoods and wellbeing. The future for horticulture and its foundation sciences within such an environment is, therefore, exhilarating, tricky, motivating and surely worthwhile. Provide support for the production and supply of good quality planting material of high yielding varieties of fruit crops, both through conventional and in vitro system of propagation. Bring more area under fruit crops with focus on location specific fruit crops in the country. Provide critical inputs for improving the productivity of old orchards/neglected orchards, Educate the farmers about the efficacy of improved techniques for increasing productivity. Provide assistance for establishing plant health clinics and leaf nutrient analysis labs for fruit crops. Provide support for integrated management of pests and diseases including disease forecasting. Increase production of Cashew & Cocoa in the country through productivity improvement and area expansion programmes. Horticulture Development through Plasticulture Interventions.

- Promote horticultural development through applications like drip irrigation, green house construction, plastic mulching, low tunnels etc. in the farmer's fields.
- Demonstrate various applications like drip irrigation, green house construction, plastic mulching at Government farms and farms belonging to ICAR Institutes, State Agricultural Universities, NGO's and progressive farmers.
- Improve the availability of quality planting material through establishment of nursery. To increase production and productivity of coconut.

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- To bring additional area under coconut in potential non-traditional areas.
- To develop new technologies for product diversification and by-product utilisation.
- To strengthen mechanism for transfer of technologies.
- To elevate the income level of small and marginal farmers engaged in coconut cultivation.
- To build up sound information base for coconut industry and market information.
- To generate ample employment opportunities in the rural sector.
- Use of new seeds and technologies.
- + Quality assurance of seed plants and produce.
- Linking farmers with market.
- Infrastructure for production and marketing.
- Investment in development.
- Increased availability of horticulture produces Adoption of technologies.
- Increased exports of horticultural crops.
- Attraction for corporate in horticulture.
- Increased availability for processing.
- Stimulation of holistic growth of horticulture sector.
- Improvement of productivity through availability of improved germplasm, seeds, planting material, use of technologies like protected cultivation, drip and sprinklers.
- Creation of production clusters and hubs to facilitate setting up of infrastructure facilities for processing and PHM.
- Development and dissemination technologies for horticulture development.
- Creation of employment generation opportunities for skilled and unskilled persons, especially youth.

VI. CONCLUSION

The analyst is indicate that there is a growing trend in the area allotted for the cultivation of horticultural crops like vegetables and fruits all over the country, which has resulted in the growth in the value of output in the last 30 years. Though the rate of growth in the value of output of the horticultural products has come down during the 2000s, it is still higher than the overall growth of the agricultural sector, which augurs well of the horticultural sector of India Moreover, there is also huge demand for the horticultural products and it is growing at a considerable rate in both the rural and urban house hold and among both the poor and rich households. Thus, every effort should be taken to increase the area and output of the horticultural crops, which are considered as high value crops, since it will considerably increase the income levels of the farmers in the area. In the Mangalore taluk is mainly we can see different types of cops are growing in Mangalore mainly we observe the main crops are coconut, cashew nut, areca nut, pepper, coco bean, pineapple and jackfruit are the main crops are in Mangalore. And their growing is very highly in the Mangalore taluk these are the important horticulture crops in Mangalore. And the mangloreans are highly cultivated these crops. And Mangalore has good climate, soil, and mainly coastal area its one of the important aspects of Mangalore. Here we can observe what are the horticulture crops in study are and their importance, scope, concept, and were distributed in the study area these are in important aspects in the topic. Review of literature methodology also in their then here we can study the Study area and objectives, these all topics included in this project work. In this project we can understand because of growing the important horticulture crops and their problems and prospects it's one of the major aspect of Mangalore.

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