

Review Of Floriculture As A Promising Industry For Marginal Farmers In Maharashtra.

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Abstract: Floriculture is the branch of horticulture that deals with cultivation of ornamental plants and flowering plants for sale or for use in perfume and cosmetics. Floriculture is the sunshine industry of India, as it offers excellent self employment good remuneration for the small and marginal farmers. The various study in past and recent concluded that the floriculture is the promising business with higher profitability than ordinary crops in open as well as in Hi-tech cultivation growing. Even marginal farmers suits well in this strategy.

Keywords: marginal, floriculture, Hi-tech, sunshine, promising, strategy.

Introduction:

Floriculture is the branch of horticulture that deals with cultivation of ornamental plants and flowering plants for sale or for use in perfume and cosmetics. Floriculture is the sunshine industry of India, as it offers excellent self employment good remuneration for the small and marginal farmers. The world's annual growth rate of the Industry is 8 to 10% per annum.[2] There are more than 120 countries who are active in floriculture on large scale. India is the second largest producer of floriculture and Roses after China with the area of 2,33,000 ha. India's ranking for flower buckeye export is 17th in the world with the share of 0.4% in 2015. In floriculture the total contribution of India to world trade is 0.61% in 2014 and up to 0.89% in 2015 according to Associated Chambers of Commerce and Industry of India (ASSOCHAM).[20] Floriculture is began in England where flowers were grown in large estate later on this was popularized all over the world. Floriculture in India is the sunshine with its wide genetic diversity. The flower cultivation in India is grown in both conditions in Open as well as in Hi-tech cultivation. In recent years there are much more changes in trends of floriculture growing in which Hi-tech floriculture is having high profit margin. Maharashtra is one of the largest states in India in terms of gross cropped area (GCA) and population. While accounting for about 9 per cent of India's population, the state contributes over 20 per cent in India's industrial output and about 13 per cent in India's GDP over the last 50 years.[1] Maharashtra is a leading state in agriculture and now emerging as an important horticultural state in country. Different type of soil, suitable agro-climatic condition, adequate technical work force, well developed markets, transport and communication facilities, increasing trend in drip irrigation, greenhouses, use of cool chain facilities and progressive farmer organization offer wide opportunities for growing different horticultural crops. Floriculture in the state is of recent origin. Until recent past, floriculture in the state confined to the traditional flowers alone. However, the private sector has now entered this field on a very large scale with greenhouse technologies. The agriculture sector of Maharashtra has undergone lot of changes. One of the significant change that take place in the cropping pattern of state especially development in horticulture crops. Area under fruit and vegetable crops has increased and recently there has been a seen increasing trend in floriculture area and production. Maharashtra is one of the leading flower

producers in the country. The state has varying soil types and agro-climatic conditions, which offer tremendous scope for floriculture. District like Pune, Nasik, Aurangabad, Sangli, Satara, Kolhapur, Thane and Nagpur are well known for flower cultivation. Pune, Satara, Sangli, Kolhapur and Nasik are well developing hi-tech floriculture district. Whereas, Pune, Thane, Nasik, Ahmednagar, Nagpur and Nanded are famous for open flower cultivation. The principal flowers grown in Maharashtra are marigold, rose, tuberose, chrysanthemum, gladiolus, aster, jasmine, kagda, mogra, gerbera, carnation etc. Maharashtra state having four major areas i.e. Western Maharashtra, Vidarbha, Marathwada and Konkan. There is great deal of variation in rainfall in the state and agriculture is mainly rain fed. The state has an average rainfall about 100 cm. The Western Ghats, Konkan, Thane, Ratnagiri, receive 300 cm rainfall, areas like Nasik, Pune, Ahmednagar, Beed, Nanded and Usmanabad get 75 to 100 cm rainfalls while Amravati, Yawatmal, Buldhana, Akola, receiving about 75 cm rainfalls.[19] The state has varied type of soil i.e. red, laterite, black, alluvial soil. The red soil is exclusively prevalent in Western Ghats and Coastal areas. Whereas, the other types of soil are prevalent almost in all region of the state. Only about 16.8 per cent of its cultivable land being irrigated as compared to the national average of 33 per cent. And more than 50% farmers are marginal farmers (farmers having less than 1 hectare area under cultivation). Maharashtra's agro-climatic condition feverous promotion of less water intensive crops like horticultural crops mainly fruits. Progressive farmers adopted micro irrigation system with hi- technique. It estimated that even if the irrigation potential were completely utilized around 60-70 per cent of net sown area in the state would continue to remain depend on rain. The alternative to sustain agriculture and enable this sector to make a positive contribution to the state as the nation's income is to diversify the cropping pattern into high value crops. Both the State as well as the Central Government has recognized this, recently. The idea that agricultural export expanded through greenhouse floriculture is desirable and identified it is successful. Many studies found that, the floriculture production, domestic consumption and export increased continually. The past study concluded that, even a holder of very small area could derive benefits from flower cultivation as compare to other ordinary crops. Maharashtra's soil, topography and climate shows a definite potential and scope for various horticultural crops. A number of horticultural development programmes have launched by the state, namely the National Horticulture Mission and other various Government

Schemes, along with productions and export intensives. The state policy has promoted green house culture as well as open field cultivation of flowers. Special programmes have introduced recently for the development of horticulture, after 1990, programmes focused on the upliftment of horticultural activities.[3] As a result, production of fruits and vegetables goes up, then floriculture identified as focus segment and ultimately policies promoted it. Geographical structure and agro-climatic condition in Maharashtra is favourable for flower production. At present production of traditional flower like marigold, Chrysanthemum, aster, tuberose, gaillardia, rose cultivated with large amount. Production under controlled condition has been increasing rapidly. The growth rate of area under open field and controlled condition are increasing by 10 to 11 per cent. This study deals with present status of floriculture and review of various studies done by various authors in this regard.

Scope and profitability of floriculture:

Various recent and past studies show that floriculture is the profitable business for marginal farmers mainly as they have less scope for cultivating different crops. According to Denchev (1990) studied Economic efficiency of the intensification of green house. It is revealed from the study that greenhouse conditions allow for regulation of microclimate and the possibility of high efficient flower production in Bulgaria. Under intensification of production costs[18]. According to Dadlani (1996) reported that world trade in floriculture was estimated to be worth nearly US\$ 6 billion and the demand was estimated at US\$ 50 billion.[4] Among the cut flowers, chrysanthemum is amongst the top three best selling flowers in almost all major flower consuming countries like Germany, Japan, U.S.A., Netherlands and United Kingdom. Chrysanthemum is favourite with florists due to their long vase life and exceptionally hardy nature. Among the different types of chrysanthemums sprays had a major share and it was likely to increase further, whereas that of standards had been on decline. The total Chrysanthemum sales in the Dutch auction during 1993 were 581 million Euros. The sales of sprays was much more than that of other types (Standards and Santinis) both in volume and total value of sales, though per unit price of spray type is lower. The top selling varieties belong to 'Reagan' family followed by 'Spinders'. According to Ganvir & Patil (2000) studied marketing of selected flowers in GulteKadi (Pune) market. In Maharashtra where Mumbai, Nagpur, Nasik are the main flower markets. The demand for flowers has been rising in the big cities especially from middle and higher income families as well as hotel industry. The prices of selected flowers were relatively high in the month of September to February.[5] According to Deshpande S.D. and Deshmukh C.M. (2002) studied the economics of production and marketing of selected floriculture plants under Hi-Tech growing. They studied the cultivation of floriculture plants viz. Gladiolus, Gerbera, Carnation, Tuberose and Roses. Their study revealed that flowers are economically advantageous for their high profit margin capacity and that too in a short period, as compared to other horticulture enterprises i.e. pomology. It is obviously true that in the initial year of cultivation, the expenditure on plant material is huge, for all these material are to be purchased from

outside. But during successive year of propagation of all these flowering plants, the planting material becomes available out of the earlier plants propagated, viz. corms from Gladiolus, clumps from Gerbera, terminal cuts. From such planting materials an average of 67 to 88% of the total variable cost can be saved, as a result of which the entire floriculture unit can be treated as bonanza to reap out the an imaginary profit in successive years.[6] According to Ghadge et al. (2002) conducted an experiment on medium-deep soil during 1997-98 to 1999-2000 to determine the most economical floriculture based cropping systems under irrigation conditions of Ahmednagar area in Maharashtra. Selected crop sequences Chrysanthemum (April planted) – wheat, chrysanthemum (April planted) – winter season onion and chrysanthemum (June planted) – groundnut were evaluated and compared with the established crop sequence groundnut – wheat in scarcity zone of Maharashtra. Among the eight cropping systems, the chrysanthemum (April planted) – onion and marigold –onion cropping sequence were found to be the most remunerative and profitable. The monetary returns recorded by these sequences were Rs 1, 34,667 and Rs 1,24,391 per hectare and benefit-cost ratio was 5.18 and 5.21 respectively. [7] According to Tilekar S N (2002) the different types of cut flowers are produced under polyhouse conditions. Among those roses, gerbera & carnations are most common. Gerbera & Carnations cannot produced under open field condition. By making use of polyhouse technology, the production of rose cut is done very intensively. In other words, abundant inputs are used in cultivation of roses under polyhouse or protected cultivation. Naturally, the unit or per hectare cost of cultivation is likely to be very high, compared to open cultivation. It is observed that there is great difference in all estimates. Cost of cultivation in polyhouse is 7 times greater than in open cultivation. Cost of marketing is also 6 times more in polyhouse. If one examines the net profit, it is Rs50,000/ hectare in open cultivation while it is Rs.11lakh/hectare in polyhouse. [8] According to Swaminathan M S(2003) in his study he reveals that floriculture in India reaches to its extreme level by the use of IVF techniques and Hi-tech cultivation which give much satisfactory results to small farmers in India.[9] According to Ravinder et al. (2006) conducted a study on contract farming of floriculture in Punjab. Study found that five companies were engaged in the business of flower seed production through contract farming. The analysis of data from farmers and contracting agencies indicated that contract farming of floriculture had been beneficial to both the farmers as well as contracting agencies. The study found that income from different flowers ranged from Rs 31,364 for ice plant to Rs 84,622 for verbena flower per hectare, while income from wheat was only Rs 20,885 per hectare [10]. According to Kale M S (2008) investigated cost of production of Hi-tech rose, she worked out cost of production of rose/hectare Rs 147.23lac among this cost of Rs.58.87lac on greenhouse establishment & 41.25lac on cultivation of rose & Rs.20.45lac on input. She estimated per flower cost which shown Rs.0.76 on cost "A", Rs.0.78 on cost "B", Rs.0.78 for cost "C". She has grouping 40cm, 50cm & 60cm type of rose according to this classification cost "C" shows Rs.4.58, Rs4.93 & Rs.5.63 respectively. She worked out per flower net return which shown Rs.1.46, Rs2.46, Rs4.46 for 40cm, 50cm& 60cm respectively. She

concluded the net returns of project were Rs.51.49 lacs. After review of cost studies it observed that, floriculture is important as regard to farm income. It proved by cost studies, flower production is getting more earning other than any ordinary crops.[16] According to Pandit S. N. and Patil. M (2009) studied 'The cultivation of Carnation in Polyhouse with organic farming in Pune district'. The study reveals that the Cultivation of Carnation flower in polyhouse gives more production in very less area. This study is useful to that farmer who belongs very less area also. The study conclude that the cultivation of carnation in 2300sq.ft. gives 3to5 lac/year of profit to the farmer.[11] According to Adat S.S. (2011) in his study, author reveals that chrysanthemum cultivation is the cheapest floriculture crops which give high yield throughout the year. Even in rainfed area and dry zone areas with low need of water in Satara district of Maharashtra.[12] According to Jadhao H.G and Bahirat J.B (2011) studied the cost, returns and profitability of Rose production in Satara district, Maharashtra. The gross value received was Rs.380242/hectare with the benefit cost ratio was 1:1.29.[13] According to Sawanshe A.Y and Adat S.S (2011) in his study reveals that the Gladiolus is the floriculture plant which gives early production and due to its continuous demand in the local as well as outside market. This study calculated that even though the Gladiolus cultivation is somewhat expensive even after that those farmers nearby metro cities get more out put than other traditional crops. According to Ruma Bhattacharya (2013) in her study reveals that farm community in West Bengal shifting from traditional paddy cultivation to floriculture. A comparison of IRR is made to establish the fact that cultivation of flowers yield higher returns even those farmers having land size so small that viability of paddy cultivation raising a question mark. A detailed study of the flower crop has been carried out in which the factors leading to the volatility of the price and dispersion of the range have also been discussed. Finally the incremental incomes of the paddy cultivation and the reported income from the selected flowers The study shows that the farmers stand gainers if they opt for flower cultivation.[14] According to Sharma. M (2014) in his thesis Economic analysis of commercial flower cultivation in Sirmaur district of Himachal Pradesh. The study revealed that the agriculture sector, the back bone of Indian economy, is facing challenges on increase in productivity & value additions. There is a need of renewed focus on identifying high value low voluminous crops to steeping up growth of allied & non-farm activities to improve value additions. It also stresses that consequences of climate on Indian agriculture need to be factored in the strategy for the development of the sector. The cultivation of commercial flowers in open & polyhouses fixed well in to the strategy to boost income & employee farmers gainfully.[17] According to Patole S.D. and Pawar P.P. (2016), the study reveals that Pune district occupies highest area (900ha) under Aster in Maharashtra. Total 90 farmers selected accordingly size group. Based on findings, it is concluded that the average per quintal cost of marketing was Rs.287.82 and 312.03 in Kharif and Rabi season, respectively of the total marketing cost, the items such as commission, transport charges and packing material cost were observed to have higher share in total marketing cost, which accounted for 46.70, 42.36 and

4.60% in kharif season while, 46.58, 41.47 and 5.37percent in rabi season respectively. The net price released by aster growers was relatively more in Mumbai market (3958.36/q) as compared to Pune market (3582.77/q) for the aster grown in Kharif season. Hence, the aster growers may give more preference to Mumbai market for selling the aster flowers in kharif season.[15]

Conclusion:

The recent and past studies shows that floriculture is the best alternative to traditional and other horticultural crops in Maharashtra, as the agro climatic condition suitable for it. Produce can be taken by the growers having marginal or small land holdings with the higher profit margin than that of cereals and other traditional crops. The demand of flowers increase day by day in the lifestyle due to increase in standard of living of the people in districts as well as in metro cities. The study reveals that Hi-tech cultivation is 8to10 times more profitable vis-à-vis open cultivation of flowers while open cultivation of flowers is much more profitable than cereals and ordinary crops .So, the conclusion comes out from the present study is that floriculture is a promising enterprise with definite returns to even marginal farmers in Maharashtra.

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