

Horticulture in Arunachal Pradesh: Prospects and Challenges with special reference to an Orange Cultivation

Nong Tayeng

Assistant Prof. of Dept. of Economics
JN College, Pasighat Arunachal Pradesh-791103

Abstract : This paper highlighted the economic prospects and challenges of horticulture in Arunachal Pradesh with special reference to Orange production. It is an attempt to analyse the role and importance of Horticulture as an alternative to traditional Agriculture Practices in the state in terms of economic growth for the cultivator. It also examined the orange productivity compare to others horticulture crops. This paper also highlighted the central and state govt. role in providing horticulture scheme and policy to augment the welfare of the farmer. The paper is based on secondary data, reports from state agriculture department, journals and books related to the topic and personal experience.

Keywords: Horticulture, Orange productivity, Prospects, Challenges, welfare

INTRODUCTION:

This paper intended to examine the economic prospect of horticulture in favour of enhancing the wellbeing or income of the farmer in particular and lifting up state horticulture share in general and also examine the viable alternatives to traditional agricultural practices which apparently has low income generation compare to horticulture. In most areas of the state like Dambuk in Lower Dibang Valley district and West Siang, East Siang, Kamle and upper siang district etc climatic condition are suitable for orange cultivation. The mentioned suitable area can be explored with modern technique and by giving incentives and encouragement to the orange cultivator the state can become the leading exporter of the product. It not only benefits the farmer rather it enhances the income of the state simultaneously. However, Orange cultivation has challenges like pest or disease management, lack of technology or mechanization, market access issue, inadequate infrastructure etc. This paper also highlighted the suggestions and possible remedial measure to tackle the issues and challenges confronting the orange cultivation in particular and horticulture as a whole. It also shows the govt scheme and policy towards horticulture development.

OBJECTIVE OF THE STUDY:

1. To assess the economic prospect of horticulture with special reference to orange cultivation.
2. To examine the challenges confronting horticulture in AP.
3. To analyse the secondary data table related to horticulture.

THE ECONOMIC PROSPECT OF ORANGE PRODUCTION IN ARUNACHAL PRADESH CAN BE SEEN AND EXPLAIN WITH THE HELP OF FOLLOWINGS TABLE AND PIE CHARTS:

The Following table highlight the level of horticulture fruits production in the state in terms of areas in hectare and production in metric tonnes during the year 2017-18 as follows:

Table no 1. Name of Fruits, Area and Production

SL.No	Name of Fruits	Area	Production(M.T)
1.	Apple	4648.30	7243.54
2.	walnut	1096.80	526.02
3.	kiwi	3385.34	7426.72
4.	pears	212.11	680.25
5.	Peach	59.54	70.30
6.	Plum	28.00	176.02
7.	Pomegranate	0.00	0.00
8.	Grapes	0.35	0.05
9.	Orange	34574.45	87362.94
10.	Pineapple	5460.18	18701.74
11	Banana	3147.66	20275.96
12	Guava	164.63	273.08
13	Mango	52.00	25.80
14	Jack Fruits	284.05	3325.23
15	Lemon	76.64	129.92

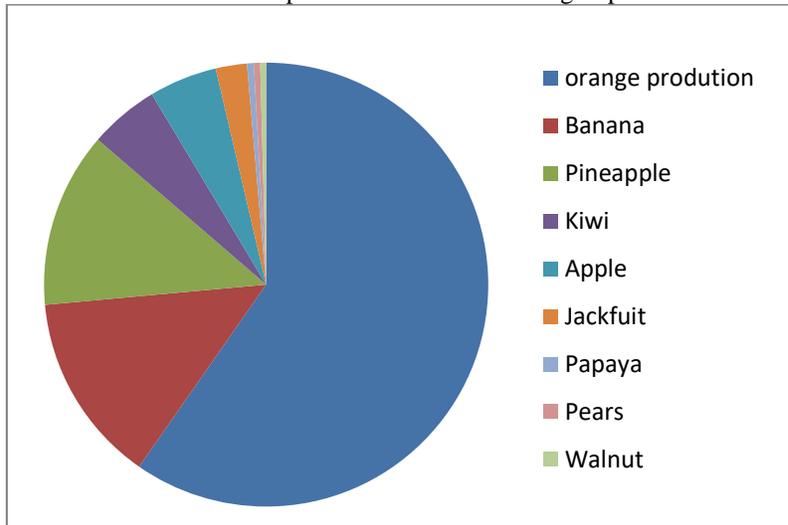
16	Papaya	237.17	713.91
17	Others Fruits Crops	110.80	463.54
	Total	53538.02	149778.10

Sources: page no 42, Statistical Abstract of Arunachal Pradesh

Implications of the data:

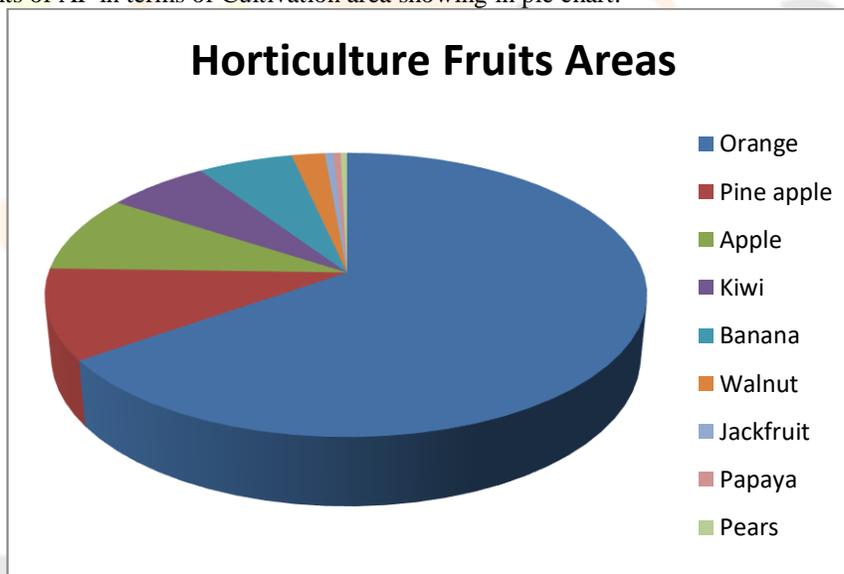
1. During the year 2017-18, among the horticulture fruits, orange stood highest in terms of area and production.
2. Orange production was followed by Pineapple and Apple respectively in terms of area.
3. In terms of production, Orange was followed by banana, pineapple, kiwi respectively.

2. a) Percentage splits of Top Ten Horticulture Fruits production of AP showing in pie chart:



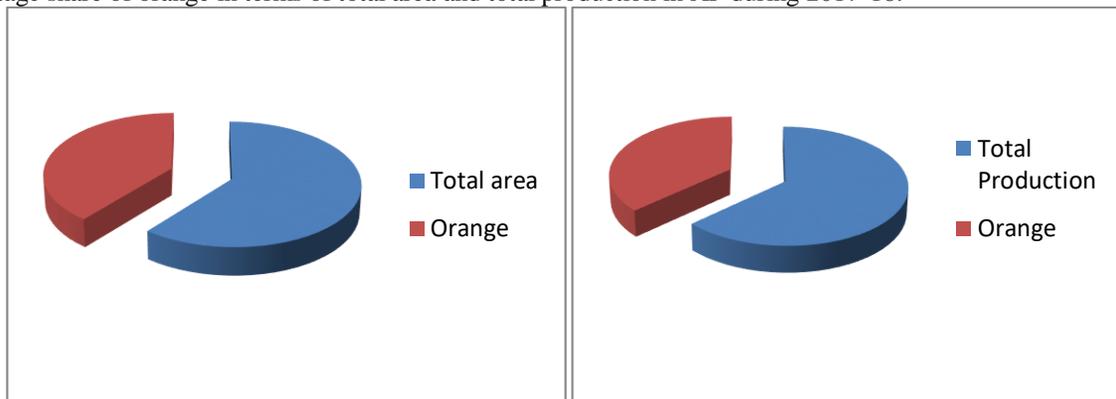
In the above given pie chart, it is clearly shown that orange has the highest level of production among the horticulture fruits during the period 2017-18.

b) Top 10 Horticulture Fruits of AP in terms of Cultivation area showing in pie chart:



In the above given pie chart, it is clearly shown that orange occupies the highest cultivation areas among the horticulture fruits during the period 2017-18.

c) Percentage share of orange in terms of total area and total production in AP during 2017-18.



The above given charts and table shows that, there is an ample scope of orange cultivation in the state. The orange not only has the highest in cultivation areas, it has also the highest in production among all horticulture fruits in the state. During the year 2017-18, Oranges show highest cultivated fruits in the state. Keeping in view the scope of Orange cultivation in the state if proper infrastructure is provided it could become the leading producer in the country.

CHALLENGES OF HORTICULTURE FRUITS CULTIVATION IN THE STATE WITH SPECIAL REFERENCE TO ORANGE CULTIVATION:

1. **Inadequate Infrastructure:**

Arunachal Pradesh is located in hilly areas where there is a lack of better road communication, lack of cold storage and transportation facility. Horticulture fruits required proper storage facility and for large scale production they need cold storage for better preservations therefore the farmers facing in above mentioned challenges.

2. **Pest/Disease management:**

One of big challenges found in orange cultivation in particular and horticulture fruits in general in the state are that, there is a inadequate supply of anti pest or plant disease materials which may help farmer in controlling them. Without proper care and timely intervention disease can destroy and affect the overall production. It has been observed that out 100% plantation only 70% manage to reached upto fruits giving tree stage so pest control measure is the need of the hour.

3. **Lack of technology and mechanisation:**

Another major challenge is the adoption or availability of latest mechanical equipments in Horticulture domain in the state. Most of the farmer are using traditional tools and adopting traditional methods of cultivation. With compare to Arunachal Pradesh most of the leading producers of orange in India are using technology in the cultivation process.

4. **Lack of marketing Facility:**

Marketing Facility is must for the commercial orange producer who expects return from their orchard. Oranges plantation normally located in rural areas where there is a lack of market access especially small farmer cannot afford to go other places to sell their products. Consequently big middle men or broker often purchased them at a very low price cutting the profitable margins.

5. **Impact of Climate Changes:**

In the state, Horticulture production varies overtime. The changes of production level often cause by the change in climatic condition as deforestation and urbanisation are going hand in hand and increasing day by day. Temperature rises overtime and sometime lack of rainfall cause low productivity in the area.

Central/State Govt role in providing scheme to developed Horticulture:

Followings were the Horticulture scheme to improve the horticulture in the state:

1. Horticulture Mission for North East and Himalayan States (HMNEH). (2001-02): This Mission is to create financial, logistics and holistic development support to enhance the growth of Horticulture development in North eastern region.
2. Rashtriya Krishi Vikas Yojana (RKVY).(2007):
It is an Umbrella Scheme initiated by Central Govt in 2007 to give holistic development to Agriculture and allied sectors like Horticulture in India. Its gives or allow states govt to choose their own agriculture and horticulture sector development and can focus on targeted area or districts and included in their state govt agriculture plan. In this scheme, the funding pattern in the ratio was done 60:40 between centre and state since 2015-16.
3. National Horticulture Board (NHB) Schemes.(2005-06): It is coming under the Ministry of Agriculture & Farmers Welfare, Govt of India. It main aims are to encourage Horticulture by helping Farmers in increasing the crop productivity & Profit.

CONCLUSION/SUGGESTION/FINDINGS:

In conclusion, there is an ample prospect of orange farming in a large scale in the state. Arunachal Pradesh is endowed with Dawnlit Mountain and natural environment conducive for orange cultivation. Economic prospect is huge if the state govt gives incentive to the farmer. However, due to challenges or hindrances explained above cause problem for the farmer to obtained optimum level in their production process. Therefore, It is the prerogatives of the state govt to supply adequately all the requirement and also to provide proper market access, Road Transport Communication, infrastructure development and horticulture scheme to encourage

the orange grower. It has also been observed that most of the orange grower are facing financial problems therefore there capital requirement must be fulfilled on priority basis. Banking Facility or credit facility must also be provided for smooth operation of the same.

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