



Study on Impact of COVID -19 Pandemic and short term Lockdown on Pineapple Industry in Kerala state of India

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ABSTRACT

Pineapple is a tropical fruit which has been cultivated for many centuries all over the world. COVID-19 had a serious impact on pineapple cultivation. The objective of the study is to analyze the short-term impact of Covid-19 and related lockdown on pineapple industry in Kerala. Secondary data has been collected from various sources like Vazhakulam Research Station, Newspapers, Magazines and online official reports of Government of Kerala. The lockdown declared during the harvest season, hit the industry very badly. Farmers became neck deep in debt and the industry also witnessed the suicide of an experienced pineapple farmer. They had even kept the field idle because of the shortage of migrant laborers. The study suggests an intervention from the part of Government in the form of better subsidies and support price and further research and development programs like value addition to pineapple.

Keywords: Covid-19, Lockdown, Pineapple Industry.

1.1 INTRODUCTION

Pineapple is a delicious tropical fruit which contains considerable calcium, potassium, fiber and Vitamin C. It is considered as a digestive food. Bromelain extracted from pineapple stem can be used for medicinal purpose. It is used not only as fresh fruit but also as canned product and juice concentrate.

The world-famous pineapple cultivating countries are Costa Rica, Philippines, Brazil, Thailand, China, India, Indonesia, Nigeria, Mexico and Vietnam. Costa Rica recorded the highest pineapple cultivation in the world. It had generated 3.42 million tonnes of pineapple in the year 2018, where the world-wide pineapple cultivation amounted to 28 million metric tonnes. Philippines and Brazil were in the second and third position with 2730990 metric tonnes and 2650480 metric tonnes respectively. India was there in the sixth position with 1706000 metric tonnes production. According to 2011 statistics, Philippines had the highest share of world pineapple production (11%). Brazil also had 11% share and Costa Rica had 10% whereas India was there in the sixth position with 7% share of world pineapple production.

It is considered that pineapple in India was first introduced by Portuguese in 1548 AD. Ministry of agriculture reports that in India, West Bengal is the first state in the production of pineapple and it is followed by Kerala and Assam (2015-16). In addition to these states Karnataka, Meghalaya, Manipur, Assam, Arunachal Pradesh and Bihar are the other major pineapple cultivating states in India.

Vazhakulam is considered as the biggest pineapple market in India, where the fruit is being transported to all over the nation and rest of the world. Pineapple is commercially grown here for more than five decades considering its worldwide demand. Kerala agricultural university established a pineapple research station in 1995 at Vazhakulam in Ernakulam district, which is the largest Asian pineapple market, to support the pineapple cultivators. The world famous Vazhakulam pineapple is locally known as 'Kannarachakka'. It has got its geographical indication registration (GI No. 130) in 2009.

1.2 Review of Literature

There are many studies related to impact of Covid-19 and related lockdown on agriculture and industries in different economies even though it is a very recent phenomenon. The studies in a very short span of time show that how badly every economy has affected by this Virus.

Timothy J. Richards (2020) conducted a study on the impact of COVID-19 on Canadian fruit and vegetable market. The study reveals that the producers were forced to shift their supplies immediately to retail channel and also affected by shortage of labourers. He predicts lasting changes in the customers online food purchasing habits and constraints on immigrant labour market in the long run.

Abid Qaiyum Suleri (2020) in his study ‘Chinese Measures to Cope with COVID-19’ found that Chinese Government treated it as a medical emergency as well as they forced banks and other revenue collecting agencies to go soft on their customers. The director general of International Labour Organisation (ILO), Guy Ryder (2020) pointed that “the corona virus pandemic is not just a medical crisis, but a social and economic one too. We have a chance to save millions of jobs and enterprises, if governments act decisively to ensure business continuity, prevent layoffs and protect vulnerable workers.”

Daniel F. Runde (2020) in his study ‘Covid-19 Demands Innovative Ideas for Financing the SDGs’ suggested that ‘advanced purchase agreements for agricultural products can also support small-holder farmers by guaranteeing their crops will be sold’.

Krishna B. Kumar (2020) in her paper ‘Crisis Beyond the Crisis’ opined that, ‘when the current virus is conquered and the state of public health and the economy return to pre-crisis conditions, many countries will still stay exposed to another endemic disease: youth unemployment’.

The review of the above studies showed that Covid-19 and lockdown brought a drastic change in the agriculture field. However, no serious studies exist relating to lockdown and its impact on Pineapple industry. Hence to fill this gap, the present study has much relevance.

2. CONCEPTUAL FRAMEWORK

2.1 Objectives

1. To know the short-term impact of Covid-19 and related lockdown on pineapple industry in Kerala.
2. To know how the shortage of labourer’s affected pineapple cultivators in Kerala.
3. To analyze the methods adopted by the cultivators to survive during Lockdown period.

3. METHODOLOGY

The study is based on secondary data. The world famous Vazhakulam pineapple is located near Muvattupuzha at Ernakulam district in Kerala. Secondary data is used to analyze the short-term effect of Covid-19 on Pineapple cultivation. The data have been taken from Vazhakulam Research Station, Newspapers, Magazines and online official reports.

4. RESULTS AND DISCUSSION

Covid-19 is a nightmare to the entire nation in general and agricultural sector in particular. Nationwide lockdown could reduce the number of positive cases of corona virus but related unemployment and poverty affected the people so badly. All of a sudden, our life got changed. Either you can go out to face the Corona Virus or you can be inside your home to face the poverty, which was the challenge accepted by common men in India. Kerala farmers were just reviving from two consecutive floods during 2018 and 2019. Still, they had many expectations because of normal rainfall and temperature in 2019. They invested more, planted more and also availed more bank loans to cover up the loss in the previous years, but then came this pandemic situation.

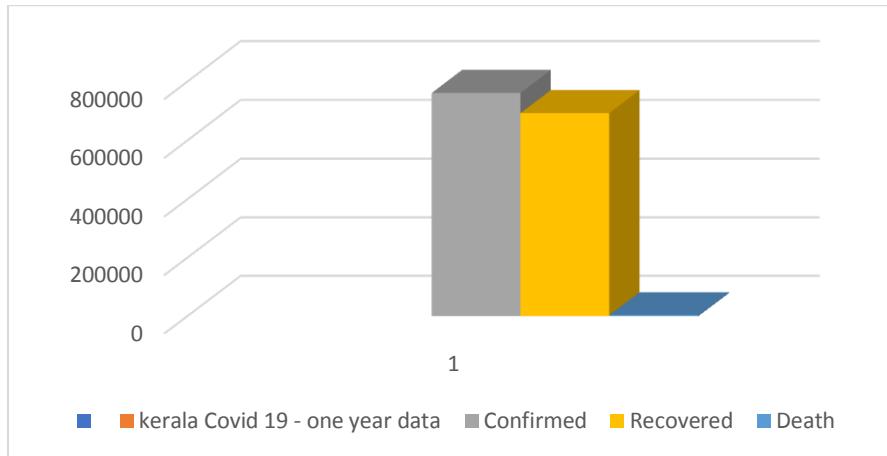
The following table shows the statistical report of Covid-19 in Kerala from 30thJanuary to 31stDecember 2020, which is given in Kerala Government official website ‘Covid-19 Jagratha’. It contains the total number of people who had affected by this disease, total recovered, diseased and present active cases as of 31st December 2020.

Table 1: Impact of COVID on Kerala (30thJanuary to 31stDecember, 2020)

Confirmed	760933
Recovered	692480
Death	3072
Active	65202

Source: Covid-19 Jagratha Portal, Government of Kerala, 2020.

Table 1 shows that the total confirmed cases within one year was 760933 in Kerala. Among them 692480 recovered, 3072 diseased and 65202 were active as of 31st December 2020. It is illustrated in the diagram below. (Figure.1)

Figure 1: Impact of COVID on Kerala (30th January to 31st December, 2020)

Source: Covid-19 Jagratha Portal, Government of Kerala, 2020.

The figure 1 shows that, the death rate is literally low compared to total confirmed cases. In most of the developed nations it was considerably high even though they had more hospital facilities and ventilators compared to Kerala. Kerala had succeeded in delaying the peak period of COVID to the month of October. For this success, the health minister of Kerala, Smt. K.K. Shylaja teacher got a remarkable appreciation from the rest of the world.

The spread of COVID-19 was different in different nations. It depends upon factors like number of people working abroad, population density, old age concentration ratio, awareness programs and the efficiency of health department. Table 2 shows a clear picture of COVID cases in different districts in Kerala. The highest populated district is Malappuram and the number of expatriates is also high, that may be the reason behind the highest confirmed COVID cases in one year (90820) reported at Malappuram among the other districts in Kerala. Kozhikode (86279) and Ernakulam (83536) were there in the second and third position respectively. Wayanad is least populated district in Kerala followed by Idukki and Kasargod and it is reported that Idukki district had the lowest COVID confirmed cases (16532) followed by Wayanad (16923) by the end of 2020.

Table:2. District-wise data of COVID-19 in Kerala (30thJanuary to 31stDecember 2020)

District	Confirmed	Recovered	Death	Active
Ernakulam	83536	74599	305	8590
Kottayam	51248	44056	151	7038
Pathanamthitta	30499	24443	55	5999
Trissur	74534	68297	329	5900
Kozhikode	86279	80744	293	5227
Palakkad	48002	42982	133	4880
Malappuram	90820	85606	337	4867
Kollam	59406	54414	219	4758
Alappuzha	57329	53215	237	3856
Kannur	39797	36009	203	3575
Trivandrum	81899	77896	658	3277
Idukki	16532	13518	19	2992
Wayanad	16923	14267	49	2606
Kasaragod	24159	22434	84	1637
Total	760933	692480	3072	65202

Source: Covid-19 Jagratha Portal, Government of Kerala, 2020.

The following diagram illustrates the district wise data of COVID-19 in Kerala.

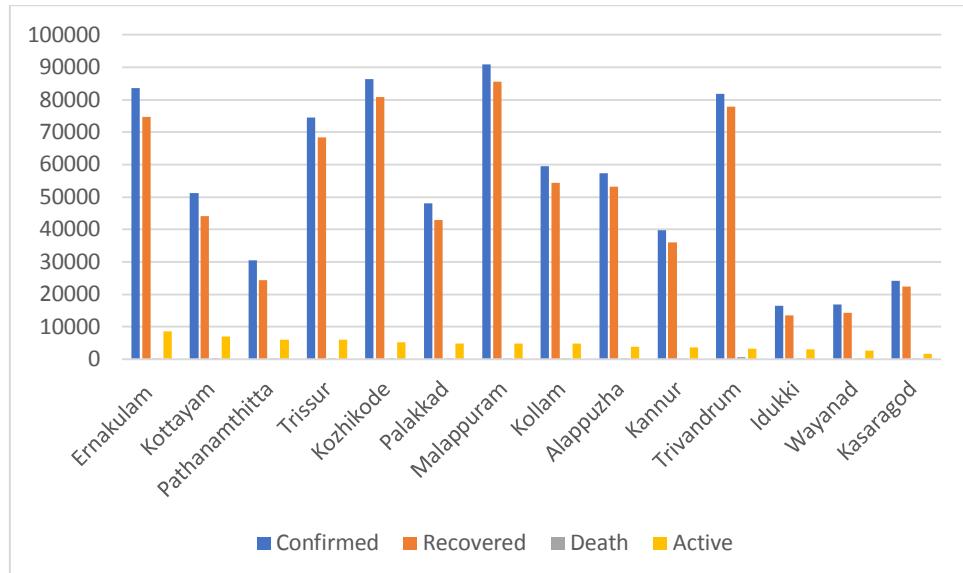


Figure:2 District-wise data of COVID-19 in Kerala (30th January to 31st December 2020)

Source: COVID-19 Jagratha Portal, Government of Kerala, 2020.

The above figure depicts that the death rate and active cases are remarkably low. The number of deaths is lowest in Idukki (16) followed by Wayanad and Pathanamthitta, where as it is highest in Malappuram (337) as of 31st December 2020.

Impact of Lockdown on Vazhakulam Pineapple

Pineapple cultivators at Vazhakulam were focusing their entire harvest for the Ramzan season in which they have a peak sale. Unfortunately, no consumers could reach the place and the cultivators couldn't even market a single product because of the unexpected lockdown. The rotten fruits were seen dumped everywhere inside the Vazhakulam market. Not only the farmers but also the vendors of pineapple affected because of the very short shelf life of pineapple. They made a condition with the farmers that the payment will be settled only after the sale. The rotten fruits finally reached the animals as its feed.

The GI tagged Vazhakulam pineapples have global recognition because of its unique taste. The fertile land had attracted the pineapple cultivators to Vazhakulam area long years back. Many of them do the farming on the leased land. Now they are in a big crisis, as the supply chains are completely closed. The entire harvest directed for the peak season in Ramzan. Vazhakulam pineapple is highly demanded by people in Delhi, Maharashtra and Mumbai. But this year everything hampered by the threat of COVID-19. The trucks were stopped at the borders of states. The total loss within the first four months in 2020 is around Rs. 300 crores.

Most of the farmers took loans to survive floods in last two years (2018 and 2019) and most of them were in neck-deep in debt. 'I lost all the money I had earned working in the soil for the last 30 years, the only thing left is debt, there is no other way but suicide.' This was the last message sent by Mr. Anil, one of the experienced farmers at Vazhakulam, before committing suicide. His son, Abhijith added that it is just a joke for the officials and politicians who are still referring all these things in the AC rooms. James George, President of All Kerala Pineapple Farmers Association, pointed that 'the further delays from the central and state government supports could lead to disastrous consequences for the pineapple growers.' Binu Skaria, former president of Marady Panchayat near Vazhakulam who has 50 acres of pineapple cultivation says that "when lockdown hit us, we didn't know what to do, we were in the middle of harvesting and all of a sudden it was impossible to parcel labour to plantations or for trucks to lift loads."

During first week of lockdown, farmers allowed locals to take pineapple as much as they want free of cost to avoid the wastage. Then the government included pineapple in the essential service list, which helped them to harvest at least standing crops, but still the marketing was not possible for the next few months. They had to pay an average of Rs. 80,000 per acre as rent, which remained same as the major part of fixed cost. Siby George, a pineapple trader at Vazhakulam opined, he had not faced much difficulty as a trader compared to the struggles that he had as a farmer. This was because of the commission he received, regardless of its price by trading the fruit.



Figure: 3 Mauritius Pineapple

An Image of Mauritius Pineapple taken from Vazhakulam Market on 30th March 2020.



Figure: 4 Mauritius Pineapple dumped at Vazhakulam Market.

An image of Mauritius pineapple taken from Vazhakulam Market on 26th June 2020.



Figure :5(A)



Figure :5(B)

Figure: 5 Mauritius Pineapples kept for sale at different prices

An image of Mauritius pineapples taken from Vazhakulam Market on June 30th (Figure:5(A)), and on July 2nd (Figure: 5(B)), 2020.

Price fluctuation is one of the main obstacles to the pineapple cultivators for few decades. The price of A grade pineapple decreased to Rs.15 per kg, where the B grade is ranged in between Rs. 8 to10. During lockdown period the fruit was seen dumped everywhere in the Ernakulam district, especially at Vazhakulam. The price tags were changed within a short span of time as it had no demand. One day they offered 7kg pineapple for Rs.100, within two days it was seen 10 kg for Rs.100 at the same place.



Figure: 6 Mauritius Pineapples kept for sale ‘as ready to eat’

An image of ‘ready to eat’ pineapples taken from Vazhakulam Market on 2nd July 2020.

The farmers started selling their products in bulk at a cheaper price to avoid wastage and also provided the fresh fruit as a ‘ready to eat’ one for the passengers in the highways.

In a personal discussion with experienced farmers, they have disclosed that the shortage of labourers would be the serious issue they are going to face which will affect the entire industry comparatively worse than COVID-19. The pineapple farms seemed abandoned during harvest time in the absence of migrant workers as the local labourers are not affordable. The number of migrant labourers decreased from 25,000 to 4,000. And the local people were reluctant to accommodate them even if they are ready to come back. It is expected to have a reduction of 1 lakh tonne in the total pineapple production because of this pandemic situation with a loss around Rs.400 crores.

Agriculture Minister V S Sunil Kumar flagged off the truckloads to Delhi with 20 tonnes of pineapple to express the solidarity with farmers protesting there, against new agricultural bill on 24th December 2020. According to James George, the president of Vazhakulam pineapple farmers association, the two main reasons for the further decline in price after lockdown are farmers protest and cold climatic conditions prevailing in North India.

5. CONCLUSION

The COVID pandemic situation led the Vazhakulam pineapple market to face severe consequences including the suicide of a 45-year-old farmer. Most of them were in debt traps. Daily loads from Vazhakulam had decreased from 500 to just 100 tonnes. The President of All Kerala Pineapple Farmers Association, remarks that such drastic situations will remain unless state or centre government intervene. The industry couldn't utilize its full potential during Ramzan, the main harvest season of pineapple as it was during lockdown. According to him, the Government can implement some measures for the immediate recovery of the industry. It can write off the interest of loans, increase the minimum support price of pineapple from Rs. 15 to Rs. 25, an affordable rate of subsidy can be given to the pineapple cultivators, entrust Micro credit Department or NABARD to give credit to farmers in an affordable manner, motivate new entrepreneurs who can make Value added products of pineapple like pineapple juice, wine, syrup, pickle, preservatives by giving an immediate licence. It can pressurize the land owners, those who have another regular income to reduce the lease amount. Migrant labourers can be substituted with jobless youngsters in Kerala who had return back from other states.

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