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IMPACTS, ROLES AND ADVANTAGES OF COVID – 19 ON LOGISTICS AND SUPPLY CHAIN MANAGEMENT SECTOR

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Abstract

Background: The first case of corona virus infection reported in Kerala, India, On January 27, 2020, a 20-year-old female, the Indian government announced a one – day ‘Janta curfew’ on 21st March and 21 – days nationwide lockdown on 23rd March. The lockdown changed the logistics and supply chain movement and shipment of goods from other countries and it’s also affected the import and export business.

Objectives: The aim of this paper is to find Impacts, Roles and Advantages of logistics sectors during COVID-19 lockdown time in India.

Methodology: A personalized questionnaire was designed in google form and distributed among the peoples. In that questionnaire form, total 17 questions have asked from general public. Total 101 responses were recorded from that form and data analysis was done in IBM SPSS software.

Results: The questionnaire was filled by all age-group of people, where 79 are male and 22 are females’, persons have filled that survey.

Conclusion: In the study we found that, E – Logistics companies are the less impacted companies in COVID – 19 lockdowns rather than other logistics companies.

Keywords:Logistics, Lockdown, Transportation, Customers, Supply Chain Management.

Introduction

The simple meaning of logistics is that means the management of transportation of product from its origin to its destination point.

Logistics involves processes like transportation, inventory, packaging of goods, supplies the product to customers, warehousing and supply chain management.

Basically, supply chain management is the key part of logistics. So, supply chain management refers to the process of flow of goods and services included all the processes that transform the raw materials into finished goods and then distribute to the customers on their demand.

As we know COVID 19 is spreading among us from year 2020 and from that year continuing India is facing some challenges. COVID – 19 effects logistics sector too, because all the activities and processes has been stopped due to it. As we are unable to transport any product to its destination. Due to COVID - 19 we have stopped our work at the point where we are.

In logistics sector COVID 19 is also affected very much because all the activities or processes had been stopped due to it. We cannot transport any type of product to its destination. We had to stopped the work at which we are at that position.

Logistics industry has been very impacted due to corona virus had a great impacted all over the world, and there are some impacts that are as follows:

- Restriction of air travel and international flights has been slowdown in the movement of goods, and India’s lockdown brought first- and last-mile transportation.
- The main mode of transporting the goods is ROADWAYS. It also affected because in India there are some areas which has been properly Seals the border and that why logistics can’t be done there.
- Water transportation of goods also effected due to COVID 19 because we have to make social distancing from each other so that’s why we cannot transport goods from one place to another.

In COVID 19 pandemic logistics sector plays very crucial role to help peoples in our country. The following are some points which logistics help us in COVID 19 pandemic –

- The first and main role is that to transport the precautions which the humans have to be made like it has been provided PPE kits to doctor and nurses, provided hand sanitizers to everyone, and Provided masks which we have to wear while we go outside.



- Second, it also provides the food and daily need accessories to the poor people which was stocked at its working place due to COVID 19 like food, water, clothes and many other things.
- Third, it provides home delivery offer to the customer during COVID 19. The customer online booked the product and then deliver it some time.
- And at last logistics sector has been faced very crucial role to peoples in India by providing them COVID VACCINNE. it has been stored in very less temperature and provided many types of deep freezers to store it and then provided to the peoples.

So, Logistics Sector Effected Also Due to Covid 19 and plays a Crucial Role During Covid 19.

There are many beneficial advantages of logistics during COVID 19. Logistics and supply chain management plays a crucial role in COVID 19 in India. There are many industrial sectors that shut down their work suddenly due to COVID 19 and lockdown and due to this there is less supply and demand of goods.

In India there are many manufacturing companies that faces the issues regarding manpower, Demand of product & supply of product.

In Lockdown, Transportation faces many issues during the delivery of products because sealing of borders and due to it the transit time also increases and demand also decrease and this take increase in cost of transportation of product.

Materials and methods

Study design

This cross-sectional survey was conducted between the first to third week of April. A personalized questionnaire was designed in google form and distributed among the peoples. In that questionnaire form, total 17 questions have asked from general public. Total 101 responses were recorded from that form and data analysis was done in IBM SPSS software.

Data collection

Snowball technique was used to collect information from general public. The questionnaire was filled by all age-group of people, a total 101 response were recorded.

Ethical issues

The participants were voluntary in survey by filling a constant letter, which was on the first section of the questionnaire by yes.

In constant form, all participants were promised to keep their private information like (name, workplace and email) secure and limited to research guides.

All participants have also given the right to withdraw their data anytime without any explanation.

Results

After analyzing the mean data of question variables, we got that the issue was about the delivery and safe packaging of food and groceries product's during the lockdown is 1.26. A total of 47 population from the sample data said YES faced issues in delivery or safe packaging of food or groceries during the lockdown.

The total 54 population from the data sample is saying NO they did not face delivery issue and safety issue regarding packaging of food and groceries products during the lockdown. The total mean value is 1.65 of the sampled data.

Table 1: - Total age group of Respondents			
Age	Frequency	Percent	Cumulative %
Below 18	8	7.9	7.9
18 -24	79	78.2	86.1
25 -30	7	6.9	93
30 -35	3	3.0	96
35-40	2	2.0	98
40-45	1	1.0	99
Above 45	1	1.0	100



Table one shows that only 8 persons are filled survey who are below 18, 79 persons filled who are between 18-24, 7 persons filled who are between 25-30, 3 persons filled who are between 30-35, 2 persons filled who are between 35-40, 1 person filled that who are between 40-45, and same here only 1 person has filled who are above 45 and total responses was recorded as 101.

Table 2: - Total mean and S.D of problem faced by respondent during lockdown

Variables	Mean	Std. Deviation	Cumulative Percent
Logistics is useful during the lockdown	1.10	.300	100%
Online order during lockdown	2.84	1.279	100%
Issue faced in delivery of foods and groceries product during lockdown	1.47	.501	100%
Issue faced in safe packaging during COVID-19 period	1.53	.501	100%
Issue faced in delivery of goods from one point to another during lockdown	1.52	.502	100%
Amazon, flipkart& other e – commerce site was delivering the product within the delivery time during lockdown	1.32	.486	100%
Online food ordered during lockdown	1.66	.475	100%
Issue faced the safe food packaging issue during COVID – 19 period	1.52	.502	100%

Discussions

Logistics and supply chain management played a vital role during Covid- 19 lockdowns. It helps to boost the Indian economy. It also helps supply pharmaceutical products to hospitals, wholesalers, and retailer markets during covid - 19 like medicine, masks, sanitizers, PPE kits, beds, vaccines, etc.

Online Logistics companies like Amazon, Flipkart, Myntra, Swiggy, and Zomato all helped to stand the logistics in India, and it shows once again, without logistics, nothing is possible.

According to data sampling, 15% population are used amazon for pursuing products, 13% Flipkart, 7% Myntra, 1% Swiggy, and 1% Zomato.

13% Population are not used any e-commerce site for purchasing goods and foods during a lockdown.

During COVID-19, many issues faced by the logistics company,

- Pick up the product
- Delivery to destination
- The increased cost of inventory, warehousing, transportation, and others cost.
- Reverse logistics
- Increased transit time
- Shortage of workforce

The logistics company faced picking up the product to the pickup point, and Trucker has a workforce shortage, skilled and trained and drivers.

The increased cost of inventory, warehousing, transportation, and others cost due to shortage of workforce.

The migration of labor has created a shortage of trained laborers in industrial centers and put stress on logistics and local distribution. It will increase the labor costs and impact operating efficiencies in the medium term. The migrants faced extreme hardship.

Increased border controls and customs regulation resulting in longer wait times.



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Conclusion

We got in the study E – Logistics companies are less affected in the COVID – 19 lockdowns than other companies, We find out the advantages of E- commerce sites those who deliver the products and foods like, amazon, Flipkart, Swiggy, Zomato and Myntra. You can see in the table, Percentages of total population those who used E – Logistics company during lockdown.

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