



INTERNSHIP REPORT

The Report is based on summer internship in Department of
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Chennai – 600006.

(27th June 2022 to 15th July 2022)

A REPORT ON THE PERFORMANCE OF DEPARTMENT OF STATISTICS AND ECONOMICS, IN THE FIELD ON STATE INCOME .

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DECLARATION

I hereby declare that this report titled “A REPORT ON THE PERFORMANCE OF DEPARTMENT OF STATISTICS AND ECONOMICS, IN THE FIELD ON STATE INCOME ” is a work done by our team and is a record of our summer internship in Department of Statistics and Economics, DMS Campus, Teynampet Chennai – 600006.(27th June 2022 to 15th July 2022)as the requirement for the completion of the course M.Sc. Statistics , under the guidance of staffs, Department of Statistics and Economics.

Date:

Place: Chennai

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We express our profound gratitude to Commissioner of Department of Statistics and Economics for the help and guidance throughout this project.

Date:

Place: Chennai

ABSTRACT

The Report is about statistical methods of analysis the 15 data are taken from Agriculture wholesale product prices in the year 2018-2021.

From this data, the total average is calculated for individual wholesale products price are used to find data interpretation.

The forecast analysis is predicted the future price values in the year 2022-2023 in addition to predict upcoming year 2024-2025 was calculated with 95% of confidence interval for Raagi, Cholan and Cumbu.

Here determined the linear trend analysis for one year of trend line possibility are shown. This analysis make a proper comparison between two or more product over a period of time.

The data comparison from the year 2018-2021 was observed whether increase or decrease of price values at a steady rate.

Reason and solution for Agriculture product price hike and suggestion is also mentioned.

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PROGNOSTICATE OF AGRICULTURE WHOLESALE PRODUCTS IN THE YEAR 2018-2021

INTRODUCTION

WHOLESALE PRICE :

Wholesale Price Index (WPI) represents the price of goods at a wholesale stage i.e. goods that are sold in bulk and traded between organizations instead of consumers.

Description: Fiscal and monetary policy changes are greatly influenced by changes in WPI. In the United States, Producer Price Index (PPI) is used to measure inflation.

WPI is an easy and convenient method to calculate inflation. Inflation rate is the difference between WPI calculated at the beginning and the end of a year. The percentage increase in WPI over a year gives the rate of inflation for that year.

$$\text{WPI} = (\text{Current Price} / \text{Base Period Price}) \times 100$$

Paddy Common
Cholam White Second sort
Cumbu Ordinary
Ragi Local
Maize local
Korra (Thinai)
Varagu
Samai
Tapioca local
Bengalgram Second Sort
Redgram Second Sort
Blackgram Nadu
Greengram Nadu
Horsegram
Groundnut Pods Dry

This are the Agriculture products are taken from the Wholesale price production data for a data interpretation.

Role of DoE&S(State Income Division):

State Domestic Product (SDP) is a measure in monetary terms of the volume of all goods and services produced within the boundaries of the State during a given period of time, accounted without duplication. This covers all the goods and services produced within the State.

Objective:

- In the basic have to know about the Essential Commodities Act (ECA) and implementation of new Amendments in 2020.
- To determine the prediction of future price value for Agriculture wholesale products have to follow some procedures.
- Here linear trend analysis used to predict the future Agriculture wholesale price values.
- The Agriculture wholesale product price Comparison between 2018 and 2021 as well as 2018 to 2021 was founded and Reason for Agriculture product price hike due to Rainfall, floods, covid-19, locust Infestation.
- Also explained about the ways to control Agri-waste as recycling. It offers a way to reduce waste and reuse in useful manner and as profitability.

Essential Commodities Act:

The Essential Commodities Act (ECA) was a Parliamentary act which governed the delivery and supply of commodities, whose obstruction could affect the lives of the common people to a great extent.

The act was modified through the Essential Commodities (Amendment) Act, 2020 and also **Indian Agricultural Acts** (Also known as Farm Bills) is formed.

Details of the Essential Commodities Act

In 1955, The Essential Commodities Act was introduced and it has been used to manage the “essentials” commodities. The government makes these commodities available for consumption at acceptable prices. A minimum prices can also be fixed by the government should it deem it necessary. The list of commodities included under the ECA are

- Fertilizers
- Pulses
- Edible Oil
- Cereals
- Oilseeds
- Petroleum and allied products
- Seeds of fruits and vegetables

***Note:** In the COVID-19 outbreak, **Masks and Sanitizers** also became listed under the ECA.

A commodity's supply becoming less and its price increasing, then the Centre can set stock holding limits for a specific period. Once the limit is set, the States will ensure that adequate steps are taken to ensure the guidelines are followed.

However, the discretion of the State to impose any form of restrictions. But the restrictions be imposed and **by conducting raids and auctioning of the excess goods** the errant shopkeeper and traders will be punished by state, who involved in black market practices.

Changes under the Essential Commodities (Amendment) Act 2020

It was announced in **May 2020 by Finance Minister Nirmala Sitharaman** that the ECA would be further amended and implemented under circumstances like **war or famine**.

The Essential Commodities (Amendment) was passed in the Lok Sabha on 15 September 2020, while it was passed by the Rajya Sabha on 22 September 2020. It received approval from the President Ram Nath Kovind on 27 September 2020.

The amendment has brought about the following changes:

- It allows the government to remove few essential commodities due to war, famine, natural calamities etc.
- Future regulations would be based on the **trajectory of rising prices**. It should effect a prices that is 100% rise in horticulture produce and 50% increase non-perishable agricultural food items

In addition to these changes the following benefits would also be brought about by the ECA Amendment:

- Creation of a competitive agricultural market and prevention of agri-waste due to increased investment in cold- storage facilities.
- Bringing price stability for farmers.

Issues Regarding the Essential Commodities (Amendment) Act 2020

- The new amendment to the ECA is believed infringe on State's powers as they will be unable to regulate hoarding and blackmarket practices.
- The stock limit relaxations under the ECA may lead to black marketing and hoarding rather than benefiting the

producers. This will lead to increase in inflation and holding few individuals over prices of certain goods.

In 1955, the amendment to the ECA the act was passed at a long time when India was not self-sufficient enough to feed its growing population. In Six decade's the scenario has changed and the Essential Commodities Amendment **Act may actually help in increasing farmer's income and improve ease of doing business.**

Forecast analysis (2022- 2025):

The absolute minimum amount of data that you need to create a monthly center forecast is 13 months of data, but it will not be very good. It is generally said that three years of data is needed to work out both trend and also seasonality.

The ideal amount of calculating the forecast is five years.

We have calculated from the year 2022-2023 using forecast function in addition to predict future years and we have used lower confidence interval and upper confidence interval with 95% interval for the year 2024-2025

Long-term forecasting is done for a period ranging from six months to five years.

Uses:

Marketers always aspire to find the best digital marketing tactics. That is why forecasting for lead generation has become popular is now widely used.

Forecasting has applications in a wide range of fields where estimates of future conditions are useful. Depending on the field, accuracy varies significantly.

If the factors that relate to what is being forecast are known and well understood and there is a significant amount of data that can be used, it is likely the final value will be close to the forecast. If this is not the case or if the actual outcome is affected by the forecasts, the reliability of the forecasts can be significantly lower.

Procedure:

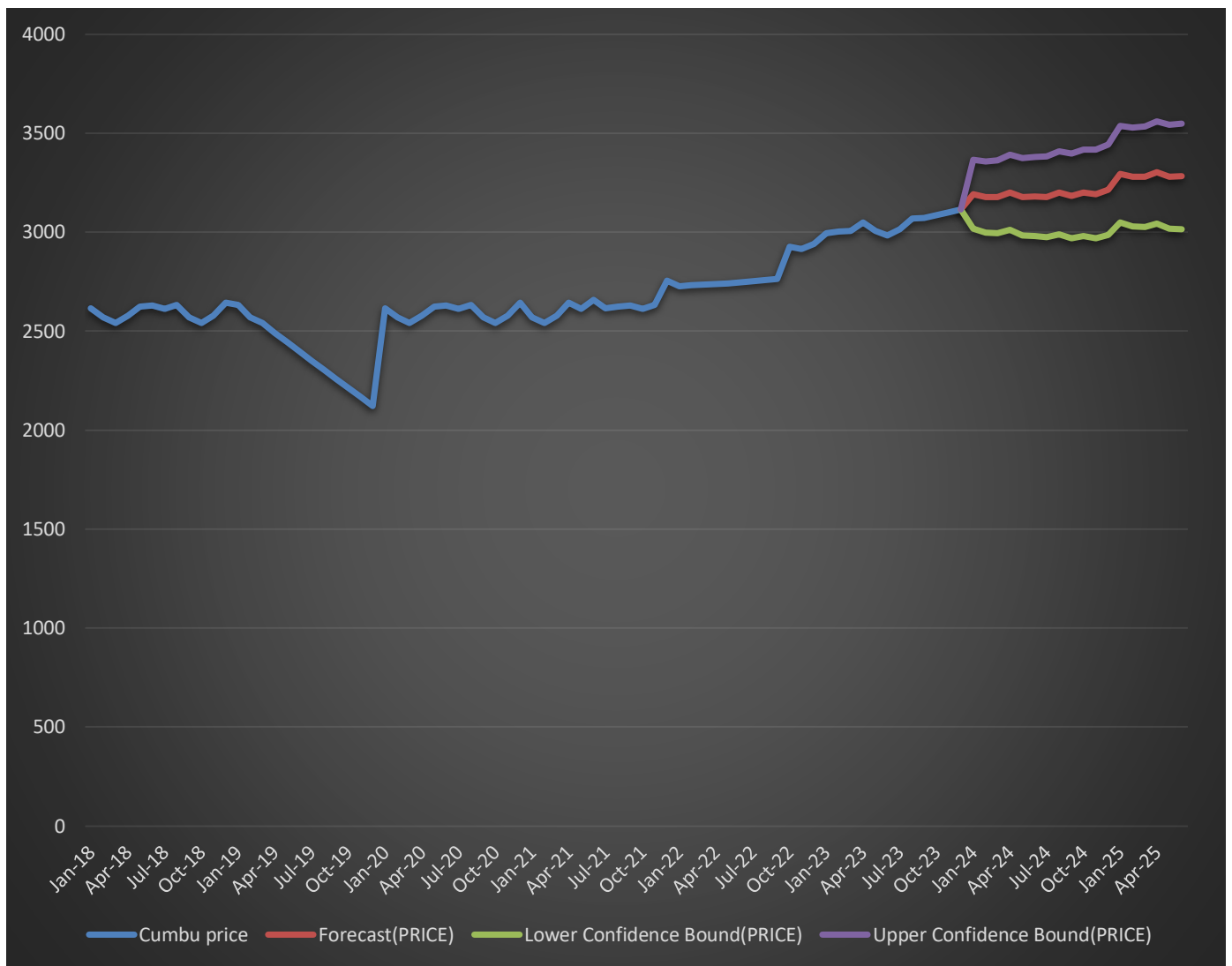
1. First enter the data in excel sheet
2. Calculate year wise forecast value by using the formula
forecast function

=forecast(x, known _y value, known _x value)

3. Where x denotes prediction of the year
Known y value denotes total price value
Known x value denotes total year
4. Select both data in excel
5. In the Create Forecast Worksheet box, pick either a line chart or a column chart for the visual representation of the forecast.
6. Confidence interval can help you figure out the accuracy of the prediction. A smaller interval implies more confidence in the prediction for the specific point.
7. In the Forecast End box, pick an end date, and then click **Create**.
8. Excel creates a new worksheet that contains both a table of the historical and predicted values and a chart that expresses this data.
9. This shows the future predication of the following year 2024- 2025.

Forecasting of CUMBU products in Year-wise 2022-2025

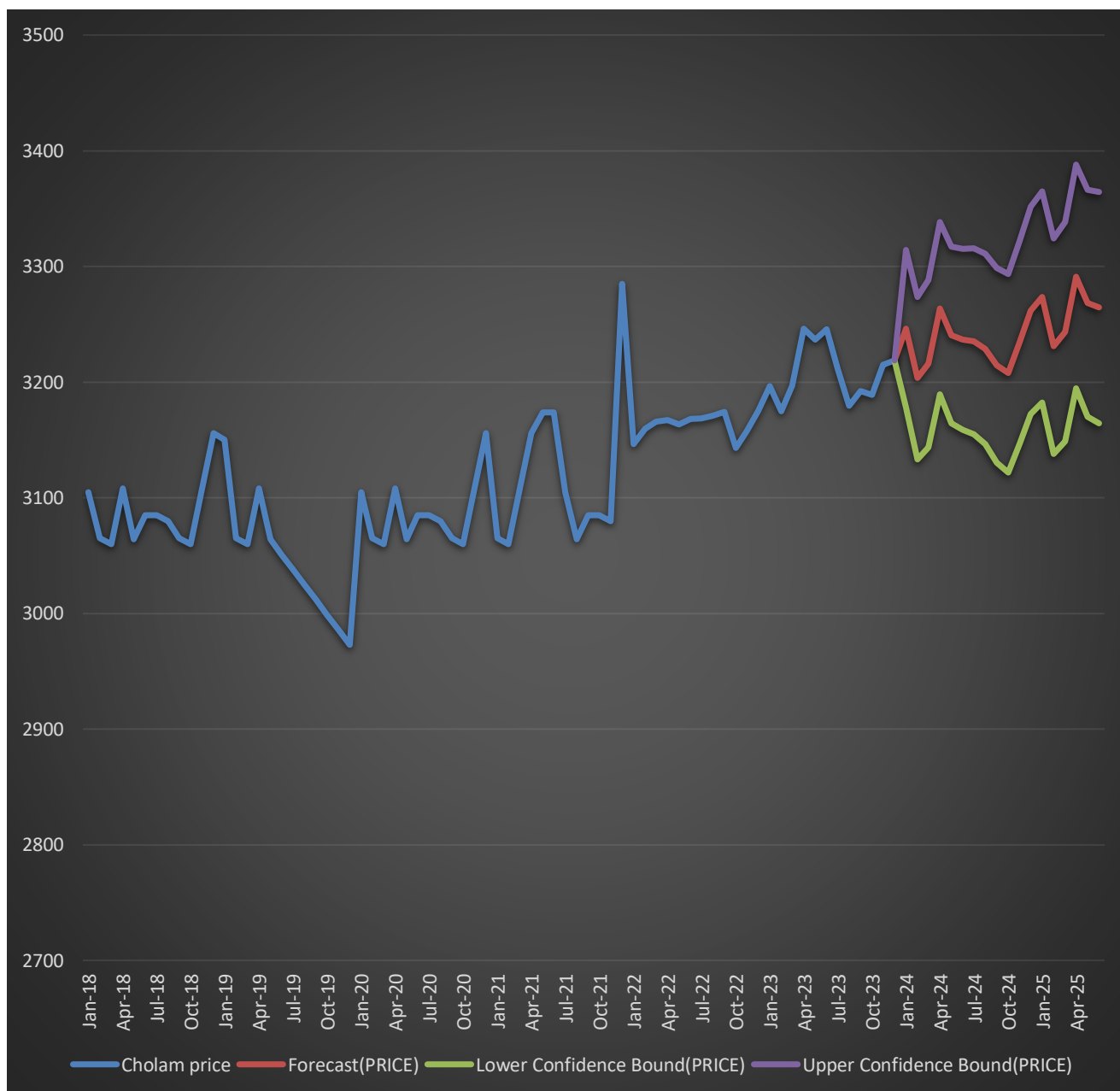
YEAR	PRICE	Forecast(PRICE)	Lower Confidence Bound(PRICE)	Upper Confidence Bound(PRICE)
Jan-22	2726.33			
Feb-22	2730.875			
Mar-22	2734.026			
Apr-22	2737.534			
May-22	2741.501			
Jun-22	2746.093			
Jul-22	2751.329			
Aug-22	2757.112			
Sep-22	2763.77			
Oct-22	2926.682			
Nov-22	2914.957			
Dec-22	2941.643			
Jan-23	2994.396			
Feb-23	3002.872			
Mar-23	3006.232			
Apr-23	3048.482			
May-23	3006.699			
Jun-23	2981.907			
Jul-23	3013.619			
Aug-23	3068.055			
Sep-23	3072.027			
Oct-23	3086.237			
Nov-23	3100.159			
Dec-23	3113.62	3113.62	3113.62	3113.62
Jan-24		3191.62	3017.82	3365.42
Feb-24		3177.808	2998.57	3357.04
Mar-24		3177.979	2993.43	3362.53
Apr-24		3200.203	3010.45	3389.96
May-24		3178.302	2983.44	3373.16
Jun-24		3180.185	2980.31	3380.06
Jul-24		3178.404	2973.60	3383.21
Aug-24		3199.665	2990.01	3409.32
Sep-24		3183.53	2969.09	3397.97
Oct-24		3198.96	2979.81	3418.11
Nov-24		3191.568	2967.78	3415.36
Dec-24		3214.771	2986.39	3443.15
Jan-25		3292.771	3047.61	3537.94
Feb-25		3278.959	3029.54	3528.38
Mar-25		3279.129	3025.49	3532.77
Apr-25		3301.354	3043.54	3559.17
May-25		3279.453	3017.49	3541.41
Jun-25		3281.336	3015.27	3547.40



From the above, forecast predication value of the Cumbu price fluctuating in the year 2022-25. From this analysis, the government should enact more precise fertilization strategies to adapt to change in soil, climate and terrain within region.

Forecasting of Cholam products in year- wise 2022-2025.

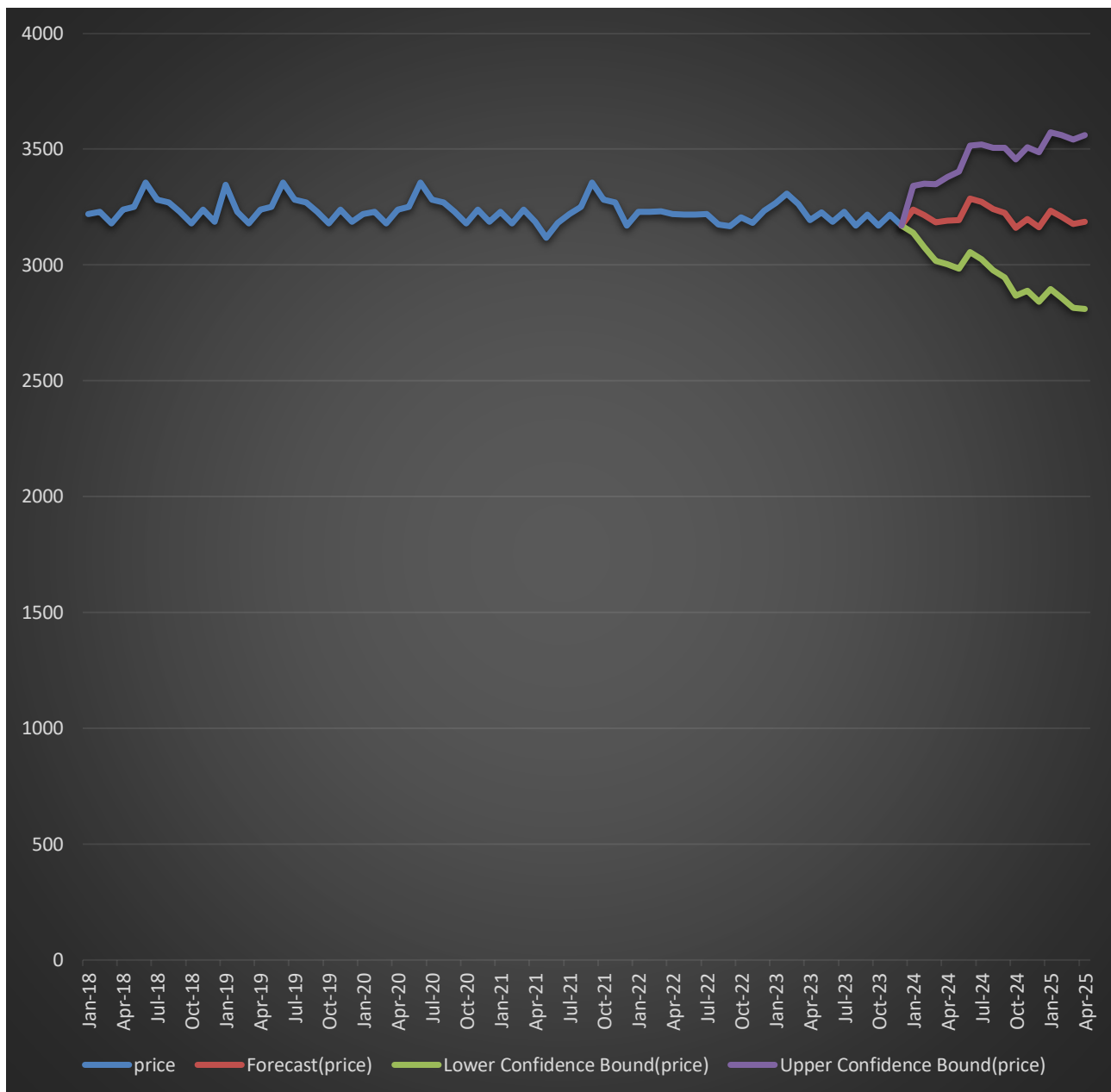
YEAR	PRICE	Forecast(PRICE)	Lower Confidence Bound(PRICE)	Upper Confidence Bound(PRICE)
Jan-22	3146.479			
Feb-22	3159.785			
Mar-22	3165.672			
Apr-22	3167.247			
May-22	3163.223			
Jun-22	3168.301			
Jul-22	3168.506			
Aug-22	3171.214			
Sep-22	3174.17			
Oct-22	3142.966			
Nov-22	3157.993			
Dec-22	3175.377			
Jan-23	3196.621			
Feb-23	3174.921			
Mar-23	3197.155			
Apr-23	3246.333			
May-23	3236.864			
Jun-23	3245.587			
Jul-23	3211.703			
Aug-23	3179.59			
Sep-23	3192.421			
Oct-23	3189.099			
Nov-23	3215.182			
Dec-23	3218.694	3218.694	3218.69	3218.69
Jan-24		3246.179	3178.06	3314.30
Feb-24		3203.421	3133.17	3273.67
Mar-24		3215.827	3143.50	3288.16
Apr-24		3263.723	3189.35	3338.09
May-24		3240.702	3164.33	3317.07
Jun-24		3236.877	3158.54	3315.21
Jul-24		3235.321	3155.05	3315.59
Aug-24		3228.663	3146.49	3310.83
Sep-24		3214.593	3130.55	3298.64
Oct-24		3207.713	3121.82	3293.60
Nov-24		3234.728	3147.02	3322.44
Dec-24		3261.982	3172.48	3351.49
Jan-25		3273.7	3182.40	3364.99
Feb-25		3230.942	3137.89	3323.99
Mar-25		3243.347	3148.56	3338.13
Apr-25		3291.244	3194.74	3387.74
May-25		3268.222	3170.02	3366.42
Jun-25		3264.398	3164.52	3364.28



In the above chart, the cholam price value rapidly fluctuating in year 2022-2025 and attain its peak level in 2022. From this prediction it helps to know the growth rate production rate of products, and With this we are aware that to sustain high food grain production to maintain the price range, we have to increase productivity too.

Forecasting of Ragi products in Year-wise 2022-2025.

year	price	Forecast(price)	Lower Confidence Bound(price)	Upper Confidence Bound(price)
Jan-22	3229.195			
Feb-22	3228.66			
Mar-22	3231.689			
Apr-22	3219.485			
May-22	3217.89			
Jun-22	3217.727			
Jul-22	3220.767			
Aug-22	3173.541			
Sep-22	3168.12			
Oct-22	3205.657			
Nov-22	3181.66			
Dec-22	3234.37			
Jan-23	3267.97			
Feb-23	3307.784			
Mar-23	3261.807			
Apr-23	3192.627			
May-23	3227.272			
Jun-23	3187.37			
Jul-23	3228.367			
Aug-23	3170.592			
Sep-23	3217.595			
Oct-23	3169.142			
Nov-23	3218.125			
Dec-23	3168.735	3168.735	3168.74	3168.74
Jan-24		3240.094	3138.16	3342.03
Feb-24		3213.966	3076.76	3351.17
Mar-24		3183.366	3018.21	3348.53
Apr-24		3191.58	3002.50	3380.66
May-24		3193.99	2983.65	3404.33
Jun-24		3286.247	3056.57	3515.92
Jul-24		3271.455	3023.91	3519.00
Aug-24		3240.973	2976.73	3505.22
Sep-24		3224.987	2945.00	3504.97
Oct-24		3161.152	2866.23	3456.07
Nov-24		3198.4	2889.24	3507.56
Dec-24		3163.337	2840.53	3486.15
Jan-25		3234.68	2895.82	3573.54
Feb-25		3208.552	2857.15	3559.96
Mar-25		3177.952	2814.41	3541.50
Apr-25		3186.167	2810.85	3561.49



In the above forecast chart observed the price value of Ragi is increases in the year 2024 and its fall in October 2024

From this prediction its helps to know the growth rate and also farmers livelihood.

Predication of individual product price wise 2022-2025

					Units in Quintal	Amount in rupees
<i>Sl.NO</i>	<i>Item</i>	<i>2021</i>	<i>2022</i>	<i>2023</i>	<i>2024</i>	<i>2025</i>
1	Paddy Common	1592	1592	1667	1663	1700
2	Cholam White Second sort	3120	3120	3158	3175	3194
3	Cumbu Ordinary	2622	2622	2746	2760	2822
4	Ragi Local	3223	3233	3210	3203	3196
5	Maize local	2304	2004	1897	1747	1543
6	Korra (Thinai)	4226	4226	4653	4684	4897
7	Varagu	4858	4858	4880	4904	4915
8	Samai	5733	5734	5252	5335	5094
9	Tapioca local	1931	1931	1927	1922	1920
10	Bengalgram Second Sort	7237	7235	7235	7229	7227

Linear trend Analysis: (2018-2025):

The linear trend line is **based on least squares regression analysis of the number of storm or surge events with time**. Trends are only calculated when at least 10 seasons of data are available

The Excel TREND Function finds the line that best fits your data by using the least squares method. The equation for the line is as follows.

For one range of x values:

$$y = ax + b$$

For multiple ranges of x values:

$$y = a_1x_1 + a_2x_2 + \dots + a_nx_n + a$$

Where:

- y - the dependent variable you are trying to calculate.
- x - the independent variable you are using to calculate y .
- a - the intercept (indicates where the line intersects the y -axis and is equal to the value of y when x is 0).

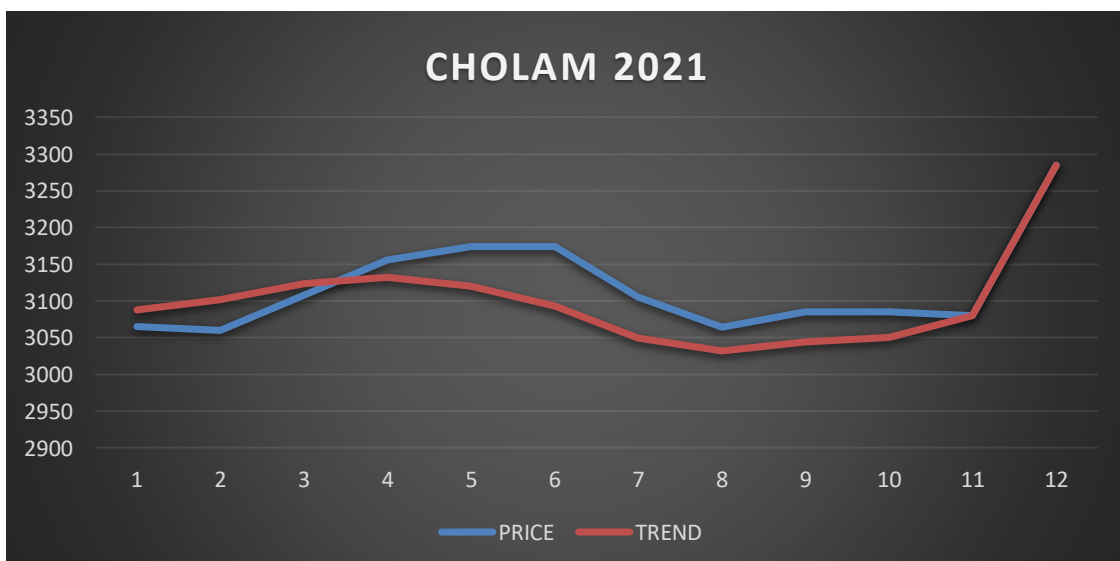
- b - the slope (indicates the steepness of the line).The value of slope is 85.119 and The value of intercept is 2450.3,

- $$Y=85.119X+2450.3$$

TREND FORMULA

=TREND(Dependent y value, Independent x value)

MONTH	PRICE	TREND
1	3065	3088
2	3060	3102
3	3108	3123
4	3156	3132
5	3174	3120
6	3174	3093
7	3105	3050
8	3064	3032
9	3085	3045
10	3085	3050
11	3080	3080
12	3285	3285



Projecting a future trend

The TREND function can extend the trendline into the future to project dependent y-values for a set of new x-values.

The syntax of the Excel TREND function is as follows:

TREND(known_y's, [known_x's], [new_x's], [const])

Where:

Known_y's - a set of the dependent y-values that you already know.

Known_x's - one or more sets of the independent x-values.

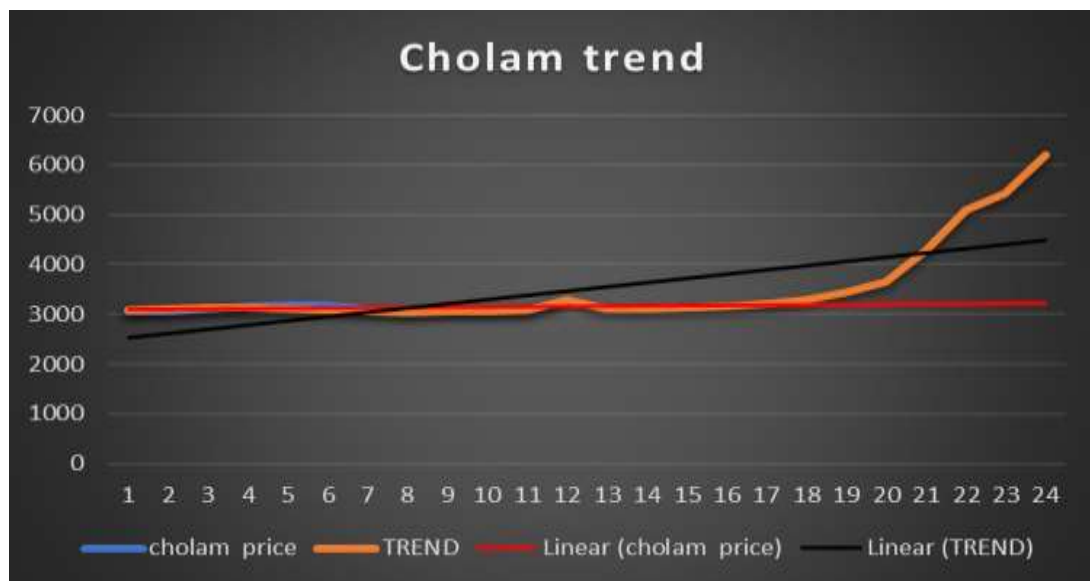
New_x's -one or more sets of new x value to calculate the future trend.

To predict a trend for the future, you just need to include a set of new x-values in your TREND formula.

For this, we extend our time series with a few more month numbers and do trend projection by using this formula:

The below screenshot shows the calculated new y-values and extended trendline:

YEAR	cholam price	TREND	MONTH
Jan-21	3065	3088	1
Feb-21	3060	3102	2
Mar-21	3108	3123	3
Apr-21	3156	3132	4
May-21	3174	3120	5
Jun-21	3174	3093	6
Jul-21	3105	3050	7
Aug-21	3064	3032	8
Sep-21	3085	3045	9
Oct-21	3085	3050	10
Nov-21	3080	3080	11
Dec-21	3285	3285	12
Jan-22		3116	13
Feb-22		3119	14
Mar-22		3127	15
Apr-22		3152	16
May-22		3206	17
Jun-22		3301	18
Jul-22		3450	19
Aug-22		3639	20
Sep-22		4300	21
Oct-22		5100	22
Nov-22		5432	23
Dec-22		6200	24



In the above linear trend chart observed the price value of cholam is decreases in the year 2021 and in increase of trend line September 2022

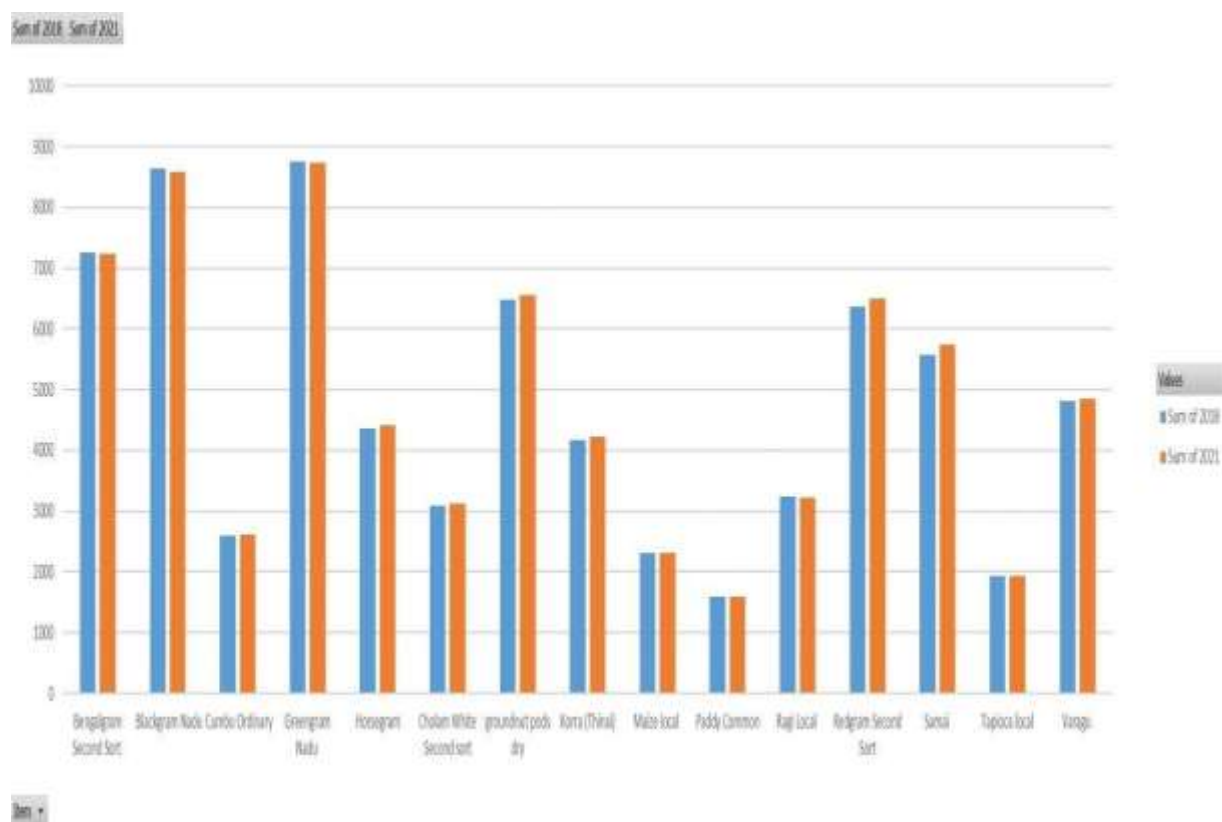
From this analysis its helps to know the growth rate and also farmers livelihood.

Wholesale data comparing from the year 2018 and 2021 :

We have taken some of the items and comparing with their prices. The highest price difference of the item in the following table is samai which is 167. this is due to the reason of the agriculture sector suffered heavy damages in 1.54 % of the net cropped area; Wayanad and Idukki were worst affected. Losses to crops have been estimated at INR 3,558 crore across 89.6 thousand hectares (4.44 % of the net cropped area).

This is major cause of increase in samai and the least price difference is black grammar Nadu. it is due to During 2019-20, locust attack was reported in some districts of Rajasthan and Gujarat. Rajasthan Government has reported that a total area of 1,79,584 hectares of 8 districts of the state was affected by locust attack during 2019-20. The State Government of Gujarat has reported that crop loss due to locust attack was observed in a total area of 19,313 hectares of 2 districts of the State during the year 2019-20.

		Amount in rupees	Amount in rupees
SI.NO	ITEM	2018	2021
1	Paddy Common	1599	1592
2	Cholam White Second sort	3087	3120
3	Cumbu Ordinary	2594	2622
4	Ragi Local	3238	3223
5	Maize local	2303	2304
6	Korra (Thinai)	4164	4226
7	Varagu	4809	4858
8	Samai	5566	5733
9	Tapioca local	1942	1931
10	Bengalgram Second Sort	7249	7237
11	Redgram Second Sort	6370	6501
12	Blackgram Nadu	8637	8579
13	Greengram Nadu	8757	8739
14	Horsegram	4360	4412
15	groundnut pods dry	6479	6549

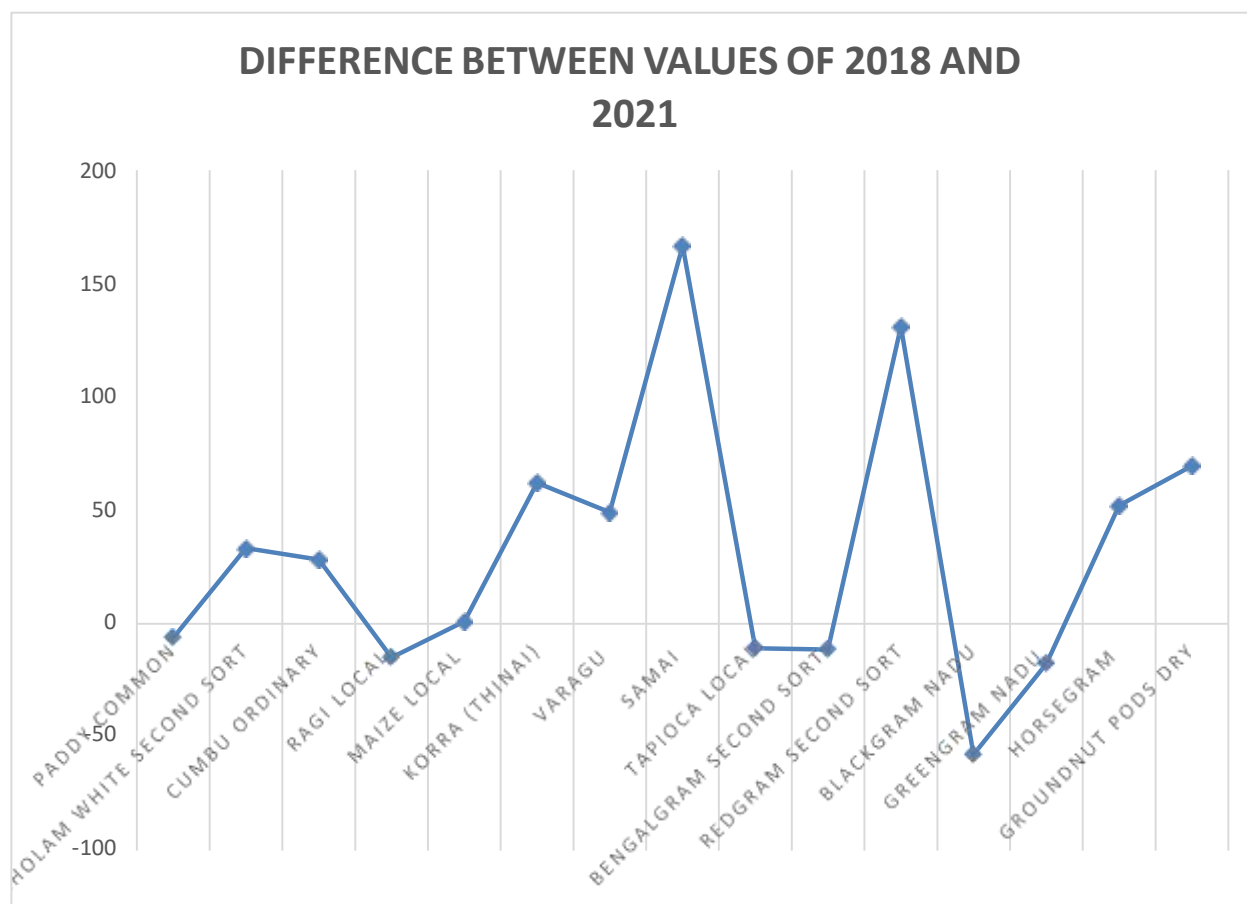


Here X axis denotes the item of the agricultural product
Y axis denotes the average prize value in yearwise.

Comparing the yearwise price values helps us to give a clear information about the items which we mentioned in the above and also improves the growth of the economy and thus government should enact more precise fertilization strategies to adapt to change in soil, climate, scheme and terrain within region..

Difference between wholesale values of 2018 and 2021

	Units in Quintal	Amount in rupees
Sl.NO	Item	Difference value from 2018 to 2021
1	Paddy Common	-6
2	Cholam White Second sort	33
3	Cumbu Ordinary	28
4	Ragi Local	-15
5	Maize local	1
6	Korra (Thinai)	62
7	Varagu	49
8	Samai	167
9	Tapioca local	-11
10	Bengalgram Second Sort	-12
11	Redgram Second Sort	131
12	Blackgram Nadu	-58
13	Greengram Nadu	-18
14	Horsegram	52
15	groundnut pods dry	70



From the above table, the item *samai* has the highest price difference compared to other items. In the other hand the lowest price difference comparing the items in the table we conclude that the *blackgram nodu* is the least difference price value.

Reasons for agriculture products price hikes in year 2017 to 2021:

Rainfalls and Floods

India has suffered a huge crop loss on 18.176 million hectares (mha) of land, roughly 8.5 per cent of the total gross cropped area due to floods from 2017-2019, according to data shared by the government in the Lok Sabha February 11, 2021.

Of this, 10.68 mha was affected in 2019 alone. In 2018 and 2017, 2.515 mha and 4.973 mha of cropped area was lost in India. The intensity of extreme floods has increased in the country, affecting newer areas that were not flood-prone earlier.

In 2019, the state also saw the second highest claims, after Maharashtra, by farmers for crop insurance under the **Pradhan Mantri Fasal Bima Yojana**.

Agriculture in Tamil Nadu has faced a thunder like hit since the low rainfall had left the crops and agricultural lands with no water for irrigation purposes. Also the Kaveri water issue became a huge headache for the farmers in Tamil Nadu, as no water is obtained from the tributaries of Kaveri river where it is the only source of irrigation for the Tamil Nadu farmers. The crops had severely charred in lakhs of hectares. It is said that the harvest in the year will be the worst ever in Tamil Nadu.

Kerala Floods (2018 to 2019)

The agriculture sector suffered heavy damages in 1.54 % of the net cropped area; Wayanad and Idukki were worst affected. Losses to crops have been estimated at INR 3,558 crore across 89.6 thousand hectares (4.44 % of the net cropped area). About 36.74% of the net cropped area of Wayanad and 17.59% of that in Alappuzha was damaged. Infrastructure worth INR 457 crore has been damaged. Perennial and annual crops, such as bananas, coconuts, areca nut, pepper, and coffee were the most impacted. Seasonal crops, such as rice, vegetable, tapioca, and other tuber crops also suffered significant losses. The recovery needs for the crop sector are estimated at INR 4193.5 crore. The major crops in panamaram panchayath are Banana, Pepper, Ginger, Coffee, Paddy and Arecanut.

Locust Infestation (2020 to 2021)

During 2019-20, locust attack was reported in some districts of Rajasthan and Gujarat. Rajasthan Government has reported that a total area of 1,79,584 hectares of 8 districts of the state was affected by locust attack during 2019-20. The State Government of Gujarat has reported that crop loss due to locust attack was observed in a total area of 19,313 hectares of 2 districts of the State during the year 2019-20.

Initially during May-June 2020, Government of Rajasthan reported crop damage of 33% and more due to locust attack in 2235 hectare area in Bikaner, 140 hectare in Hanumangarh and 1027 hectare area in Sri Ganganagar; but now, as per revised report, it has been stated that earlier submitted data was related to initial stage of crop sown in Kharif season and this area of crop loss has been re-sown by farmers.

Covid-19 (2020 to 2021)

COVID-19 pandemic has disrupted the Indian agricultural system extensively. Nevertheless, the recent quarterly GDP estimates post-COVID scenario showcase robustness and resilience in Indian agriculture, the only sector to register a positive growth of 3.4% during the financial year (FY here after) 2020–21 (Quarter 1: April 2020 to June 2020).

At the same time, the immediate past quarter growth was estimated at 5.9% witnessing a decline by 2.5% point. In this context, we aim to synthesize the early evidence of the COVID-19 impact on the Indian agricultural system viz., production, marketing and consumption followed by a set of potential strategies to recover and prosper post-pandemic.

Ways to control agriculture waste

Agricultural waste is composed of organic waste excreta in the form of slurries and farmyard manures, spent mushroom compost, soiled water and silage effluent.

Include:

- **Human waste**
- **Animal waste**
- **Plant waste**
- **Waste management**

If waste are not properly handled they can pollute surface and groundwater and contribute to air pollution.

The proper management of waste from agricultural operations can contribute in a significant way to farm operations.

The waste which is reduce, recycle and make it usable for different purpose is a waste management.

COMPOSTING:

Farmers can reduce waste by composting many of their items. They are good for the soil and help the plants to grow. This is a great environmentally friendly option that farmers can take advantage of. Some of the many things that you should compost are

- Animal Waste
- Plant
- Weeds and Grass Cuttings
- Leaves, Straw, and Hay

RECYCLING (மறுசுழற்சி)

Recycling is the process of converting unusable product into usable to prevent someone loss.

Some of the recycled items

1. **Biofuel** ▪ Crops rich in cellulose (corn stalk)-
ethanol

- Crops rich in lipids (unproductive oil)- biodiesel

2. Plastic Substitute and Bioplastics

Bagasse(stalk of sugarcane)-bowls,plates etc.,

Plastics made from bagasse are natural fiber products that are compostable and degrade in 30-60 days after use. This makes them a great alternative to Styrofoam and other plastic products.

Bioplastic can be used as flower bed and green waste.

They reduce the company's overall footprint because they are more sustainably produced than conventional petroleum-based plastics, and are also recyclable.

CONCLUSION:

Over view of data, the analysis such as forecast , linear trend, data comparison and predication of the individual products in year-wise . It observed that product price fluctuation over a prolonged period. From this prediction it can leads to make better decisions about crop production, input costs, and other factors. This presentation will discuss the current and future state of forecasting in agriculture from 2021-2025.. This will help identify future earning and expenditure trends that long term influence on government policies and strategic goals.

THANK YOU