A Study of Indian Agriculture Crop Production & Export Pattern With Reference To Wheat: An Analytical Study

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Abstract

Agribusiness is a significant division in India. It is essential for the sustenance and development of the Indian economy. On a normal, about 70% of the family units and 10% of the urban populace is reliant on farming as their wellspring of employment. Today, India is a significant provider of a few farming items like tea, espresso, rice, flavors, oil dinners, new natural products, new vegetables, meat and its arrangements and marine items to the worldwide market. India is an enormous maker of a few horticultural items. Regarding amount of generation, India is the top maker on the planet in milk, and second biggest in wheat and rice. Farming creation is inclined to a few dangers which influence the two makers and customers. So as to improve speculation and accomplish a supported increment underway, sound and incorporated long haul techniques and strategies are required to lessen hazard avoidance and manufacture adaptability among Indian country makers. There is a need to give gainful costs to farmers so as to build the livelihoods of farmers. The target of the paper is to consider the significant farming
yields creation, fare and import of horticulture crop i.e. wheat. Pattern examination, graphical investigation and ANOVA (Analysis of Variance), unmistakable measurements like as Mean, Variance, and Standard deviation and so forth has been use for the testing of speculation

**Introduction**

Agribusiness involves the most significant situation in Indian economy. The job of agrarian division in Indian economy can be seen during its commitment to GDP (Gross residential Product) and business. This area likewise contributes a lot to maintainable monetary improvement of the nation. The manageable agribusiness improvement of each nation relies on the wise blend of their accessible normal assets. The huge target for the improvement of horticulture segment can be acknowledged through fast development of farming which relies on expanding the zone of development, editing force and profitability. Despite the fact that for a nation like India, expanding efficiency is a higher priority than the remainder of the two. This is just a direct result of expanding urbanization, industrialisation and the restricted land size of the nation. The profitability can be expanded by two different ways: (I) expanding yield by effective usage of accessible assets; (ii) expanding yield by variety of info. The principal framework is better regarding profitability and manageability. In any case, because of expanding populace, this framework can't give a changeless arrangement. In this way we can go for the second framework which may conceivably cause ecological corruption in the economy and influence its manageability. Subsequently there is requirement for handling the issues identified with manageable agribusiness advancement.

**Definition of Agriculture**

The word agriculture comes from the Latin words ager, means the soil & cultura, means cultivation. Agriculture includes Crop Production, Animal Husbandry & Dairy Science, Agriculture Chemistry & Soil Science, Horticulture, Agri Economics, Agri Engineering, Botany, Plant Pathology, Extension Education and Entomology, which develops its separate and distinct branches of agriculture occupying now a days place in several Agri University/colleges in the state.

Wheat is developed in all the states in India with the exception of Southern and North Eastern states. Uttar Pradesh, Haryana, Punjab, Rajasthan are the significant wheat delivering states and records for practically 80% of all out generation in India. Just 13% region is rainfed. Major Rainfed wheat zones are in Madhya Pradesh, Gujarat, Maharashtra, West Bengal and Karnataka. Focal and Peninsular Zone represents absolute 1/third of wheat territory in India. All India premise just 1/3 inundated wheat gets wanted water systems and remaining is constrained water system as it were.
Rearing projects are for the most part focused on rainfed and inundated situations and there is have to create assortments which are receptive to constrained water system conditions.

**Review of Literature**

Singh, Krishna M. and Ahmad, Nasim and Sinha, Dhruv and Mishra, Rewati, (2019), The examination depends on setting up connection between rural execution and lack of healthy sustenance and to look at the components affecting hunger in the nation. Connection and relapse investigation was done to build up connection between farming execution and hunger and to look at the elements impacting lack of healthy sustenance in the nation. Results demonstrated that there is negative relationship among’s lack of healthy sustenance and agrarian exhibitions subsequently, added to diminish hunger. Different elements like access to safe drinking water, can offices in family unit, Basic Vaccination given to the youngsters, Percentage of Children breastfed following one hour of birth going before five years of overview were surveyed solid components influencing lack of healthy sustenance.

Neeraj Singh, Piyush Kumar Singh and Sunil Kumar (2018) the present examination has been embraced to assess the development in region, generation and profitability of Wheat crop in Azamgarh division of eastern Uttar Pradesh. In any case, the profitability of Wheat displayed a positive pattern with the direct and compound development paces of 1.80 and 1.77 percent, individually. Among the region, creation and profitability in Azamgarh division of Eastern Uttar Pradesh, the generation displayed higher development rates with an expanding pattern because of expanded pattern in development paces of zone and efficiency.

Das, Mousumi and Sharma, Ajay and Babu, Suresh Chandra(2017), this investigation looks at the advancement of Indian states toward the Sustainable Development Goals. There is proof of the two separates and linkages among nourishment security markers along the farming sustenance pathways. Through a widened and thorough methodology under one planning body with a decent arrangement of improved intercessions and administration, Indian states can achieve nourishment and sustenance security by 2030. Such proof based strategy making is need of great importance to watch sway on the ground, as opposed to surrounding arrangements dependent on philosophies. When the spotlight is increasingly more on sway, the move to why we do inquire about and what it adds to taking care of the issue is progressively significant.

Nin Pratt, Alejandro(2016)This paper contends that the IR is a deficient marker to gauge and think about the examination endeavors of a different gathering of nations and proposes an elective list that permits important correlations between nations. Results acquired utilizing the new R&D force marker with an example of 88 nations show that the venture exertion in creating nations is a lot higher than the one watched utilizing the regular IR measure.
Limbore, Nilesh. (2015). Right now analyst's goal is to consider the significant horticulture crops generation, fare and import of farming harvest wheat. A scientist additionally does there logical investigation of this significant agribusiness crop Wheat.

Himani (2014) The present examination makes an investigation of agribusiness division in Indian economy. The investigation affirms that horticulture segment has accomplished huge development throughout the year in Indian economy. In addition, their commitments in GDP, business and fares are likewise rising extensively. To keep up and quicken the development and commitments of this segment and to create it as a genuine motor of monetary development, there is rationale and reason of corresponding interests in physical framework just as in human capital.

Need of study
The greater part of the Indians are straightforwardly or by implication relying upon the agribusiness. Some are straightforwardly connected with the cultivating and some others are associated with working with these products. India has the ability to deliver the nourishment grains which can have huge effect in Indian Economy. To accomplish focused on mark by the administration it needs to offer help if there should arise an occurrence of land, bank advances and different hardware to the little ranchers alongside the huge farmers with this we can anticipate some improvement in Indian economy. There is a need to provide remunerative prices for farmers in order to increase the incomes of farmers.

Objectives of the study
1. To study the Indian agricultural crop production i.e. wheat.
2. To study the Indian export and import pattern of agriculture crop wheat

Research Methodology

Secondary data: Researchers reuse and repurpose data as optional information since it is simpler.
Optional information has been from APEDA Agri Exchange and MSAMB, DGCIS
Annual Export, Database of National Horticulture Board, Ministry of Agriculture, Govt. of India, Food and Agricultural Organization (FAO), UN Comtrade, as announced by the bringing in nations and so on.
**Statistical tools and techniques:** For estimating different levels and dissecting the gathered information successfully and productively to reach sound determinations, certain measurable systems were utilized. Pattern investigation, graphical examination and ANOVA (Analysis of Variance), enlightening insights like as Mean, Variance and Standard deviation and so on have been utilized for the testing of theory. Apparatuses like as SPSS (Statistical Package for Social Science) 20.0 variant and MS-Excel for examination intention were likewise utilized.

**Data Analysis**

Table 1 shows the Area, Production & yield in India i.e. Wheat

<table>
<thead>
<tr>
<th>Year</th>
<th>Area(mha)</th>
<th>Production(mton)</th>
<th>Yield(q/ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014-2015</td>
<td>30.47</td>
<td>95.85</td>
<td>31.45</td>
</tr>
<tr>
<td>2015-2016</td>
<td>31.47</td>
<td>86.53</td>
<td>27.50</td>
</tr>
<tr>
<td>2016-2017</td>
<td>30.42</td>
<td>92.29</td>
<td>30.34</td>
</tr>
<tr>
<td>2017-2018</td>
<td>30.79</td>
<td>98.51</td>
<td>32.00</td>
</tr>
<tr>
<td>2018-2019</td>
<td>29.58</td>
<td>99.70</td>
<td>33.71</td>
</tr>
</tbody>
</table>

In the above figure specialist see that the Production of Indian farming harvest Wheat. Any Graphs with bended pattern lines are commonly used to show a polynomial pattern. This generation of wheat shows
the second request polynomial pattern in the given dataset. This pattern is an expanding all together and creation of wheat is developing consistently from the year 20015 to the year 2019. R-squared is a factual proportion of how close the information are to the fitted relapse line. It is otherwise called the coefficient of assurance, or the coefficient of numerous judgments for different relapses. The worth R-square is a portion somewhere in the range of 0.0 and 1.0, and has no units.

<table>
<thead>
<tr>
<th>Year</th>
<th>Export Qty.(in MT)</th>
<th>Export Value( In Crores)</th>
<th>Import Qty.(in MT)</th>
<th>Import Value( In Crores)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-2014</td>
<td>5.56</td>
<td>9261.61</td>
<td>.01</td>
<td>26.92</td>
</tr>
<tr>
<td>2014-2015</td>
<td>2.92</td>
<td>4991.84</td>
<td>.03</td>
<td>58.74</td>
</tr>
<tr>
<td>2015-2016</td>
<td>.67</td>
<td>1061.77</td>
<td>.52</td>
<td>870</td>
</tr>
<tr>
<td>2016-2017</td>
<td>.27</td>
<td>447.85</td>
<td>5.75</td>
<td>8509.05</td>
</tr>
<tr>
<td>2017-2018</td>
<td>.32</td>
<td>624.37</td>
<td>1.65</td>
<td>2357.84</td>
</tr>
<tr>
<td>2018-2019</td>
<td>.18</td>
<td>369.17</td>
<td>.0027</td>
<td>5.44</td>
</tr>
</tbody>
</table>
Table: 3

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.585 a</td>
<td>.342</td>
<td>.122</td>
<td>4.98626</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Year

Table: 3.1

ANOVA a

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>38.730</td>
<td>1</td>
<td>38.730</td>
<td>1.558</td>
<td>.301 b</td>
</tr>
<tr>
<td>Residual</td>
<td>74.588</td>
<td>3</td>
<td>24.863</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>113.319</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Production
b. Predictors: (Constant), Year

d. Predictors: (Constant), Year

Table: 3.2

Coefficients a

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>-3872.912</td>
<td>3178.820</td>
<td>-1.218</td>
</tr>
<tr>
<td></td>
<td>Year</td>
<td>1.968</td>
<td>1.577</td>
<td>.585</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Production

In the table no. 3.2 shows the output of the ANOVA analysis and whether researcher have a statistically significant difference between the year wise Indian agriculture crop production of wheat. The p-value is compared to some alpha level in testing the null hypothesis. Researcher can see that the significance level is 0.000, which is high 0.301. So the model does not fit the data. A straight line, depicting a linear relationship, described the relationship between these two variables i.e. year and Indian production of wheat. And, therefore, there is a statistically insignificant difference in the Indian agriculture crop production of wheat.
Findings

1. This pattern shows the increasing trend of wheat consistently from the year 2015 to the year 2019.

2. The p-value is compared to some alpha level in testing the null hypothesis. Researcher can see that the significance level is 0.000, which is high 0.301. So the model does not fit the data. A straight line, depicting a linear relationship, described the relationship between these two variables i.e. year and Indian production of wheat. And, therefore, there is a statistically insignificant difference in the Indian agriculture crop production of wheat.

Suggestions

1. There is a need to improve outlay and accomplish a supported increment underway, cognizant and incorporated long haul procedures and arrangements are required to lessen hazard avoidance and construct adaptability among Indian provincial makers.

2. There is a need to give gainful costs to farmers so as to build the wages of farmers.

Conclusion

In the above information investigation, researchers show that supposition of India is perhaps the biggest maker of wheat on the planet yet underway of wheat, India is anything but an enormous exporter. In figure 1, India is the biggest maker of wheat and Indian creation of wheat shows straight relationship yet in figure 4, India isn't a lot of huge exporter of horticulture crop wheat. India needs to improve the fare procedures and increment the fare of farming harvest w

References


