Impact of Farm Bill Policy Performance and Determined in Agriculture Production on the Indian Economy

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Abstract: This study makes farm bill policy performance and determines its impact on the Indian economy in agriculture production. The data was collected from secondary sources of handbook statistics on the Indian economy, Reserve bank reports, and various journals. This study period was taken from 2008-2009 to 2019-2020. The study used variables and tools are Rice, Wheat, and Total Food Grains, the Percentage Change, and Multiple Linear Regression models for analysis. Rice and wheat food grains mostly increase positively significant in this analysis report. So, the government farm bill is essential in increasing the agricultural production of food grains in India.

Keywords: Farm, Agriculture, Food grains, Bill, Increasing.

I. INTRODUCTION

The homestead bill permits the ranchers to sell and morals our products outside the Agricultural Produce Market Committee (APMC) managed markets [5]-[11]. This bill is a bundle of regulations set back like clockwork that gloriously affects cultivating vocations, how food is developed, and what sorts of food varieties are developed. Covering programs going from crop protection for ranchers to good food access for low-pay families, from starting ranchers preparing to help for economical cultivating rehearses, the homestead bill makes way for our food and ranch frameworks. As the main backer for family ranchers and supportable agribusiness, we must ensure that this significant bill is great for ranchers, customers, and the indigenous habitat. Like clockwork, the ranch bill lapses and is refreshed: it goes through a wide system where it is proposed, discussed, and passed by the Congress government and is then endorsed into regulation by the president. Each ranch bill has an interesting title, and the current homestead bill is known as the Agriculture Improvement Act of 2018 [4]. This study makes to cultivate bill strategy still up in the air in agribusiness creation its effect on the Indian economy [12].

II. REVIEW OF LITERATURE

Jyoti Prakash Sahoo, Kailash Chandra Samal, and Dibakar Behera [1] concentrated on permitting ranchers to offer their produce to whomever they needed outside ‘mandis.’ In an arrangement that fundamental lies in moving people out of farming into creation and administration [13]-[19]. Resistance groups say the opportunity to sell will require the end of government acquisition by MSPs [20].
They uncovered that cultivating gives economies of scale to makers and guarantees a base cost [21]-[27]. In this concentration, as opposed to high estimating and new cultivating cash upheld that Indian ranchers to put it, ranchers need the opportunity to sell and move out of cultivated [28]-[32].

III. OBJECTIVES
To analyze the impact of farm bill policy performance and determine agriculture production

IV. METHODOLOGY
This study was collected from secondary sources of handbook statistics on the Indian economy, reserve bank reports, and various journals [33]-[37]. This study period was taken from 2008-2009 to 2019-2020. The study used variables and tools are Rice, Wheat, and Total Good grains, the Percentage Change, and Multiple Linear Regression models for analysis [38]-[41]. The government farm bill has announced its performance impact and determined agriculture production [42]-[49].

Table 1. Performance of Farm Bill in Agricultural Production Food Grains in Indian economy from 2008-2009 to 2019-2020

<table>
<thead>
<tr>
<th>Year</th>
<th>Rice</th>
<th>% Change</th>
<th>Wheat</th>
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<tbody>
<tr>
<td>2008-09</td>
<td>991.8</td>
<td></td>
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<td></td>
<td>2344.7</td>
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<td>2009-10</td>
<td>890.9</td>
<td>-10.17</td>
<td>808</td>
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<td>2181.1</td>
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<td>2011-12</td>
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<td>6.05</td>
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<tr>
<td>2012-13</td>
<td>1052.4</td>
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<td>-1.44</td>
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<td>2013-14</td>
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<td>2650.4</td>
<td>3.07</td>
</tr>
<tr>
<td>2014-15</td>
<td>1054.8</td>
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<td>865.3</td>
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<td>2520.2</td>
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Source: Handbook of Statistics on the Indian Economy

From above table 1, Rice production and wheat production slowly increased from 2008-2009 to 2019-2020. The production of Rice and Wheat has increased by 9.71 percent and 9.22 percent, the highest change in the years 2011-2012 [50]-[55]. For this reason, West Bengal, Bihar, and Jharkhand registered significant improvement in yield, cultivating an area of production emerging as the highest producer of rice and wheat in India. In favor of that initiative regarding pulses and oilseeds yield results [2]. The Total of Food Grains increased from 2344.7 lakh tonnes in 2008-2009 to 2966.5 lakh tonnes in 2019-2020. The highest percentage change of total food grains was 12.09 percent in 2010-2011 [56]-[62]. Food security concern endures regardless of all out-food grains stocks [63]-[67]. The food security issues regarding food grains endure more as far as reasonable expanded privileges under the proposed public food security bill 2011 [2].

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Table 2. Impact of farm bill policy determined in Agriculture Production of Total Food Grains on Indian economy from 2008-2009 to 2019-2020

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>Standard error</th>
<th>t</th>
<th>Sig</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-106.862</td>
<td>158.450</td>
<td>-0.674</td>
<td>-0.517</td>
<td>0.974</td>
</tr>
<tr>
<td>Rice</td>
<td>1.418</td>
<td>0.385</td>
<td>3.680</td>
<td>0.005</td>
<td></td>
</tr>
<tr>
<td>Wheat</td>
<td>1.297</td>
<td>0.3770</td>
<td>3.446</td>
<td>0.007</td>
<td></td>
</tr>
</tbody>
</table>

Source: Calculated by the Researcher

The following model table 2 shows that the R Square value of 0.974 for 2008-2009 to 2019-2020 is a relatively predictor as it explains about 97 percent variation in the dependent variable. The regression coefficient of the independent variable for Rice and Wheat, the Coefficient values significantly increase to 1.418 and 1.297.

In light of that. While the record foodgrains creation in 2008-09 and agreeable cushion supplies of rice and wheat have improved the ability to manage cost pressures in 2009-10 under the insufficient precipitation, upgrading the rural result, driven by better return and enhancement of harvests, accepts significance [68]-[92]. Higher speculation supported by exploration and expansion exercises could be basic for enlarging yield. Other than the arrangement center around utilizing higher MSP(Minimum Support Price) to produce supply reaction and public speculation on growing the water system potential, further developing the market structure for rural items guaranteeing serious evaluation, supporting choices for the executives of yield vulnerability, satisfactory stockroom offices and further developed country streets improving better network with metropolitan business sectors likewise should get more noteworthy approach consideration [93-125]. Better water the executives with an accentuation on water gathering would be significant for directing the effect of underneath ordinary rainstorm on ranch yield.

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The stock reaction would likewise rely upon better administration of water as additionally specialized and institutional enhancements in the ranch area and partnered exercises [178-189]. Land solidification, further developing area quality, better seeds, water system, reaping, advancements, and store network to retail focuses can add to bringing down expansion and the expansion assumptions shaped adaptively [2]. The food grains, rice, and wheat great agro-climatic circumstances, multi-pronged drives, for example, motivations for crop enhancement, issuance of soil wellbeing cards, center around incorporated water system conspires, a worked-on crop protection plot and further developed showcasing offices established an empowering climate [190-199].
The record creation prodded a broad drive to acquire rice and wheat to recharge drained stocks and worked with the cradle stock development during the year. Interestingly, the execution of the GST isn’t relied upon to affect feature expansion in the close term. In any case, the declarations of ranch advance waivers and the execution of the seventh CPC with the probability of reception at the state level have suggestions as far as financial slippages with potential gain tensions to the future direction of feature expansion [3].

Generally speaking, the food grains creation in 2018-19 is assessed; while the development of rice and wheat set a standard, heartbeats and coarse oats declined. In the homestead area, overabundance supply conditions comparative with the request, achieved by progressive record harvests during 2016-17 and 2017-18, has stood up to strategy specialists with the sensation that this has happened before of surplus food the executives - enormous support stocks; less feasible open doors for global exchange perspective on abundance supply conditions in horticultural items around the world; low food costs in India; and low ranch salaries, all in a self-building up twisting [3].

The Foodgrains creation is assessed to have filled in 2019-20, driven basically by rice and wheat record creation. A productive homegrown inventory network becomes basic here. Likewise, the center should now turn into streamlined commerce in horticulture. In the first place, the correction of the Essential Commodities Act (ECA) is expected to energize private interest in inventory network foundations, including stockrooms, cold stockpiles, and commercial centers. Second, the Farmers’ Produce Trade and Commerce (Promotion and Facilitation) Ordinance, 2020, is pointed toward working with boundary deregulation in horticulture produce. Third, the Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Ordinance, 2020 will enable ranchers to draw in processors, aggregators, wholesalers, huge retailers, and exporters compellingly and straightforwardly. With this empowering administrative system, the center should go to (a) crop broadening, de-stressing water chuggers, despite how politically troublesome it could be; (b) food handling that upgrades timeframe of realistic usability of ranch produce and limits post-gather squanders; (c) horticultural products which uncover the Indian rancher to worldwide terms of exchange and innovation, and (d) public and private capital arrangement in the homestead area [3].

The Modi Government gave higher MSP than before the government and purchased more from ranchers than before the government, and has paid beyond twofold from 2009-to 2014. The Indian government prior passed the three Farm Bills 2020. The Parliament agreed with the Indian president on Sunday, September 27, 2020. The Farm Bill 2020 incorporate three bills; Farmers’ Produce Trade and Commerce (Promotion and Facilitation) Bill, Farmers’ (Empowerment and Protection) Agreement on Price Assurance, and Farm Services Bill and Essential Commodities (Amendment) Bill. With the president’s gesture, all the three Farm bills 2020 have become acts to achieve more horticulture changes and give the ranchers the best market cost for their produce.

In India, ranch bills 2020 mirror an enormous primary alter endeavored by the Modi government with the vision to give certainty to corporate interests in an agrarian biological system to make it rewarding for ranchers. In 2020, recently passed ranch bills will give ranchers the exchange opportunity states and approve them to transform into merchants of their produce and oversee the strategy. The focus on the back of these three bills is that the new guideline will make a bionetwork where the ranchers and brokers will partake in the opportunity of the decision of offer and acquisition of Agri-produce and advance obstruction-free bury and intra-state exchange and business outside the actual premises of business sectors informed under State Agricultural Produce Marketing regulations.
V. CONCLUSION
Based on the result findings of this study, farm bill policy performance determined agriculture production and its impact on the Indian economy. In this analysis report, rice and wheat food grains significantly increase positively. So, the government farm bill is essential in increasing the agricultural production of food grains in India.

Conflicts of Interest: The authors declare that they have no conflicts of interest to report regarding the present study.

REFERENCES


28. T. Kumar, “The impact of written visual materials in the development of speaking skills in English


42. Thowfeek, MH. Salam, MNA. Students’ Assessment on the Usability of E-learning Websites. Procedia-Social and Behavioral Sciences, (2014);141; 916-922.


441-450, 2018.


76. D. Kem, “Victim identification, identification devices, lead information and communication technologies in teaching and learning through open and distance education system: A paradigm shift,”
92. E. Murugan, S. Arumugam and P. Panneerselvam, “New nanohybrids from poly (propylene imine) dendrimer stabilized silvernanoparticles on multiwalled carbon nanotubes for effective catalytic


International Journal of Innovation, Creativity and Change, Volume 5, Issue 2, August, 2019, Pages 1499 to 1516.


137. Hariprasath Manoharan, Yuvaraja Teekaraman, Ramya Kuppusamy, Arun Radhakrishnan, K


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153. Ratnam Kamala Sarojini, Palanisamy Kaliannnan, Yuvaraja Teekaraman, Srete Nikolovski, Hamid Reza Baghaee, ”An Enhanced Emulated Inertia Control for Grid-Connected PV Systems with HESS in a Weak Grid” Energies 2021, 14(06), 1455 (1-21);

154. Subramanian Vasantharaj, Indragandhi Vairavasundaram, Subramaniyaswamy Vairavasundaram, Yuvaraja Teekaraman, Ramya Kuppusamy, Nikolovski Srete, Efficient Control of DC Microgrid with Hybrid PV—Fuel Cell and Energy Storage Systems” Energies 2021, 14(06), 3234 (1-18);


2021.


