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A Study on Various Strategies to Improve Crop With a Reference to Haryana State

With activities like "Make in Haryana" and "Happening Haryana", the territory of Haryana has intended to build up itself as a chief speculation, assembling and food handling centre. The motivation behind this paper is to dissect the horticultural patterns in Haryana in the developments of creation, gross and net region under creation, editing power, yield, degree of water system and surveying the spread of agrarian R&D and expansion administrations, credit creation and harvest protection in similarity with practical rural turn of events and homestead family government assistance. Our technique for examination will incorporate expanded information mining and breaking down the agrarian development patterns utilizing progressed measurable and business investigation instruments in Microsoft Excel. This paper additionally investigates expected open doors in direct showcasing, contract cultivating, market combination, food handling and bundling, development of warehousing and storerooms in similarity with rising speculation openings in these areas under the "Make in Haryana" activity powerful human endeavors in light of the fact that the locales vary regarding their requirements and asset gifts. Since there has been a developing agreement about the need of region level rural arranging, it would hold any importance with measure the degree of horticultural movement at locale level. An examination at the region level will

be valuable to define region explicit horticultural arrangements. It is additionally enlightening to comprehend the progressions in trimming design throughout the long term. The reality of arising intense local irregular characteristics has not yet gotten the public consideration, it merits. The principle point of the examination is to pick up knowledge into the greatness of endeavors expected to accomplish adjusted farming development in Haryana.

INTRODUCTION

Haryana is overwhelmingly a horticulture economy with prevalence of wheat, rice, bajra, mustard, sugarcane and cotton. In the new years, business direction of the state farming is more connected with mustard, vegetables, natural products and so forth and the region under pluses has declined significantly. The yearly accumulate development pace of grains creation in the nation for the period 1966-67 to 2010-11 has been assessed at 2 percent. Anyway for a similar period, creation of pluses expanded at a much lower yearly accumulate development pace of 1 percent. Among the grains the yearly compound development rates for fine oats, viz. wheat and rice are 3.7 percent and 2.4 percent while for coarse oats, viz. bajra and jowar the development rates are 1.4 percent and - 0.76 percent for a similar period separately. These progressions in editing design have particularly set apart in the areas which have seen the appearance of Green Revolution. For instance, the pluses creation in Haryana has declined alarmingly from 952.0 thousand tons in 1975-76 to 100 thousand tons in 2009-10. Opposite, during most recent forty years, wheat creation in the state has expanded about ten times, from 1059 thousand tons in 1966-67 to 10500 thousand tons in 2009-10. Likewise the rice creation has expanded from 223 thousand tons to 3630 thousand tons during a similar period, more than sixteen-overlap. The records of all out edited region and trimming power in the state have

expanded from 100.98 and 100.83 in 1975-76 to 121.02 and 133.53 in 2008-09 separately. The decrease underway of heartbeats, which are the principle wellspring of proteins for a huge part of populace in the state just as in the nation everywhere, isn't just raising questions about the healthful security yet in addition demonstrates primary change of the state farming. An eminent component of changes in trimming design in Haryana is the improved portion of the oats, possessing two third of absolute edited territory. Sangwan (1985) detailed that adjustments in the state editing design came about because of expansion in water system offices to an enormous degree. Thinking about the variety of soil, agro-climatic conditions and accessibility of channel water system and framework administrations (e.g., streets and managed markets) across the sub-locales, possibility to develop fluctuated sorts of yields exists in the state. The data at public or state level on total development land usage design offers no adequate piece of information for

OBJECTIVE

- (i) To assess the specialization of various districts in different crops.
- (ii) To examine the suitability of the different districts for growing various crops.

1) AREA, PRODUCTION AND YIELD OF PRINCIPAL CROPS

Haryana has horrifyingly low zone under woods (4% as indicated by 2013-14). Having a decent woods cover is the fundamental need for reasonable agribusiness and thus steps should be taken towards afforestation. Wheat, Rice, Bajra, Cereals, Pulses, Sugarcane, Cotton and Oilseeds are the chief harvests delivered in Haryana. Following are the patterns for creation and territory under chief yields for the year 2013-14. Haryana is a gigantic maker of Wheat and Paddy.

Table 1.1. Following are the trends in Wheat and Rice for Haryana from 2000-01 to 2014-15

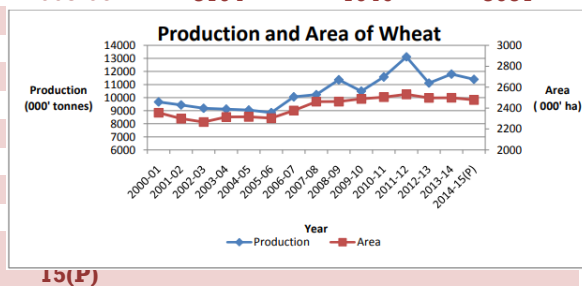
	Wheat	Paddy	Total Food grain	Sugarcane	Cotton	Oilseeds	Total
Area Under Principal Crops (000' Ha)	2499	1228	4357	102	564	549	6243
Production (000' Tonnes)	11800	3998	16944	7500	2017	899	Nil

Table 1.2. Haryana Wheat Statistics

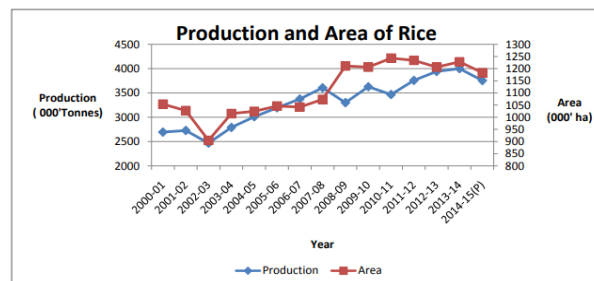
Year	Production (000' Tonnes)	Area (000' ha.)	Yield (kg. per ha.)
2000-01	9669	2355	4106
2001-02	9437	2299	4103
2002-03	9188	2267	4053
2003-04	9111	2315	3937
2004-05	9043	2316	3901
2005-06	8853	2303	3844
2006-07	10054	2376	4232
2007-08	10232	2461	4158
2008-09	11360	2462	4614
2009-10	10488	2488	4215
2010-11	11578	2504	4624
2011-12	13119	2531	5183
2012-13	11117	2497	4452
2013-14	11800	2499	4722
2014-15(P)	11399	2478	4600

Table 1.3. Haryana Rice Statistics

Year	Production (000' Tonnes)	Area (000' ha.)	Yield (kg. per ha.)
2000-01	2695	1054	2557
2001-02	2726	1027	2652
2002-03	2468	905	2724
2003-04	2790	1015	2749
2004-05	3010	1024	2939
2005-06	3194	1046	3051

**Figure 1a. Production of wheat was highest in 2011-12 at 1,31,19,000 Tonnes.**

Since then wheat production has shown a downtrend. This can partially be attributed to the decrease in yield rates.

**Figure 1b. Creation of Rice was most elevated in 2013-14 at 39,98,000 Tons.**

Rice creation has demonstrated a steady upswing for as far back as decade and has expanded emphatically with increment in territory under creation.

Despite the fact that the yield rates for wheat and rice have expanded throughout the years for Haryana, they are yet to coordinate the yield paces of China. Haryana delivered 3044 kg paddy in a hectare as against 6,686 by China in 2011. Expanding crop yield or expanding the territory under creation, these are the solitary two different ways of expanding all out farming creation in an economy. Haryana is predominately an agrarian economy where increment in populace and land discontinuity has guaranteed that there is no further chance of expansion in region under development. Consequently expanding the normal yield which can coordinate the worldwide principles set by nations like China is the quintessential undertaking in Haryana's agribusiness today through feasible agrarian turn of events.

CROP INSURANCE

Agribusiness in India is profoundly inclined to hazards like dry seasons and floods. It is mandatory to shield the ranchers from regular disasters and guarantee their credit qualification for the following season. For this reason, the Government of India presented numerous horticultural plans all through the nation The "Pradhan Mantri Fasal Bima Yojana" (Prime Minister's Crop Insurance Scheme) was dispatched by Prime Minister of India Narendra Modi on 18 February 2016. It conceives a uniform premium of just 2 percent to be paid by ranchers for Kharif crops, and 1.5 percent for Rabi crops. The premium for yearly business and plant harvests will be 5 percent. Climate Based Crop Insurance Scheme (WBCIS) depends on a few climate boundaries, for example, shortage precipitation, abundance precipitation, temperature and dry days rather than yield boundaries. 3,58,051 ranchers have been covered till Rabi 2013-14 under the plan. Guarantee of 5,765.42 lakh has been settled up to Rabi 2013-14. Adjusted National Agriculture Insurance Scheme (MNAIS) is being executed in 4 locale specifically: Karnal, Kaithal, Rohtak and Jind areas for Wheat and Paddy crops. 2,59,416 rancher have been concealed to Rabi 2013-14. 6,169.51 lakh as premium have been gathered up to Rabi 2013-14. Guarantee of 4,695.48 lakh have been settled up to Kharif 2013.

Just around 4.05% of the all-out number of ranchers has been shrouded in the protection plans. Basic agro-climatic varieties, for example, sporadic precipitation circulation over the long haul and space and expansion in the recurrence and seriousness of dry spells, floods and twisters and rising temperatures, have been reasons for vulnerability and danger bringing about misfortunes in rural creation and of animals populace in India. The above protection plans were dispatched with the goal of giving a far reaching protection answer for the ranchers in case of disappointment of any of the advised harvests because of regular disasters, nuisances and infections. Development and reinforcing of existing protection plan to guarantee benefits for all harvests and creatures is one of the prime worries for Haryana's horticulture.

DIRECT MARKETING

Direct advertising is the since quite a while ago felt need of ranchers and customers as it goes far in guaranteeing higher compensation to the ranchers and meeting the fulfillment level of buyers through direct offer of horticultural wares by the ranchers to the purchasers at moderate costs. Apni Mandi at Panchkula and Chandigarh is a fine illustration of direct showcasing as the ranchers as makers bring the item straightforwardly available to be purchased to the shoppers. Activities like Apni Mandi in Haryana or Rythu Bazar in Andhra Pradesh should be additionally advanced in Haryana to dispense with the mediators, limit market expenses and offer the sensible rates fixed each day to the two makers and customers. The public authority ought to give sufficient foundation, 0 20 40 60 80 100 Storage limit and Procurement (Lakh Mts.) Year Storage Capacity and Total Procurement of Wheat and Rice Total normal stockpiling limit (lakh MT's) Total Wheat Procurement in the State (Lakh Mts.) Total Paddy Procurement in the State (Lakh Mts.) data on agrarian information through specialized help, train more number of understudies for R&D in agribusiness, coordinate classes and Krishi Melas for rancher schooling and other rural augmentation administrations.

CONTRACT FARMING

Agreement cultivating can be characterized as rural creation did by an arrangement between a purchaser and ranchers, which sets up conditions for the creation and promoting of a homestead item or items. Commonly, the rancher consents to give concurred amounts of a particular agrarian item. These should

fulfill the quality guidelines of the buyer and be provided at the time dictated by the buyer. Thusly, the purchaser resolves to buy the item and, at times, to help creation through, for instance, the stockpile of homestead inputs, land arrangement and the arrangement of specialized counsel. From the past numerous years, the ranchers of Haryana have been selling their produce at Minimum help costs (MSP). Agreement cultivating and private obtainment hasn't developed much in the state. The state government ought to empower contract cultivating as per the arrangements of the model APMC act accordingly offering ranchers the occasion to acquire more exorbitant costs just as defending their advantage with respect to conclusive price tag and a fixed pre characterized amount at a fixed time.

FOOD PROCESSING

Haryana is the biggest exporter of basmati rice, the biggest maker of occasional catch mushroom and the second biggest maker of food crops in India. Rural utilizes around 60% of all out populace. Major Kharif yields of Haryana are rice, jowar, bajra, maize, cotton, sugarcane and jute. Major Rabi crops are wheat, tobacco, gram, linseed, rapeseed and mustard. The quantity of little scope Agro Processing Industries in the state isn't sufficient to measure the accessible overflows. According to Govt. of Haryana's Vision Document for the Food Processing Industry, 2013, Haryana's food preparing industry comprises of few huge scope worldwide players and an immense number of little scope players and house businesses. It is obvious from this that the food handling industry of Haryana is exceptionally divided. A dominant part of the preparing ventures are situated in and around the areas of Delhi NCR. About 75% of the absolute preparing enterprises are occupied with handling of food grains and oil seeds which incorporates millings of different oats like rice and wheat, mustard and rapeseed. Consequently the spotlight should be on development of additional provincial based Agro Processing Centers so that crop wastage is evaded, transportation costs are diminished and esteem is added to the different items. Alongside outside speculation, rancher Co-agents additionally need to embrace food handling alongside creation. Haryana Agro Industries Corporation Ltd. (HAIC) has been occupied with an assortment of exchanging exercises, for example, offer of seeds, composts, farm haulers, and so on MoFPI has endorsed 5 virus chain extends in Haryana under the plan for Cold Chain, Value Addition and Preservation Infrastructure.

ECONOMICS AND EMPLOYMENT GENERATION THROUGH HORTICULTURAL CROPS VIS-A-VIS OTHER CROPS

The effect of the National Horticulture Mission in Haryana on net returns per section of land was evaluated through examination of chosen plant crops with different yields developed by the ranchers during 2008-09. Consequences of tested overview brought up that gross returns per section of land from garlic development were discovered higher than other chose plant crops during the reference year and this was valid for net returns also. Wide varieties were seen when net returns were determined at absolute expense subsequent to including fixed expenses caused by the cultivators of organic product crops. Among organic products crops, viz, kinnow, guava and aonla, net gets back from last were discovered higher than initial two yields. Ranch size varieties were basic in gross returns and net returns per section of land. If there should arise an occurrence of kinnow, a converse relationship could be found out between ranch size and returns. Be that as it may, a blended situation arose if there should be an occurrence of staying two plant crops. Thusly, any connection among returns and homestead size couldn't be found out. An examination of net gets back from development of chose agricultural harvests with different yields during the kharif season has displayed that blossoms followed by sugarcane and cotton were discovered unrivaled than paddy as far as net returns per unit of land. The financial aspects of moong, a minor heartbeat crop developed on examined ranches was likewise worked out and benefit was analyzed versus other rainfed kharif harvest, for example, bajra. This heartbeat crop gave higher net returns per section of land in contrast with bajra. It was seen that vegetables and summer moong were prevalent harvests than wheat, gram and mustard as far as returns during rabi season. An examination of net gets back from kharif, rabi and green harvests developed by the recipient ranchers demonstrated that blossoms followed by garlic, aonla and guava were prevalent yields regarding benefit in contrast with customary harvests like wheat and paddy on inspected cultivates in Haryana (Table 4.5). Results show that chose green yields created higher work in contrast with a few conventional harvests. Specifically, garlic produced most elevated business per section of land as far as work days. Among different classes of ranchers, minimal ranchers utilized more than normal number of work days in developing these harvests. Further, weeding and entomb social tasks were discovered most work

concentrated and in this manner, higher extent of work days was utilized for these exercises.

CONCLUSION

The above investigation shows that despite the fact that Haryana is one of the main maker states for food crops, there is a wide extent of progress in the regions of harvest yield, proficient water the executives, reach of horticultural credit, arrangement of warehousing offices and improvement of preparing focuses. Under the „Make in Haryana“ flag, a colossal measure of speculations have been acknowledged and it is obvious that there is an unselfish potential for additional future interests in the above areas. Really at that time can Haryana coordinate itself with the worldwide principles of agribusiness.

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