

Economic Feasibility of Major Crops of Haryana:

A District Wise Analysis (2010-11)

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Abstract: *Agriculture is a primary and most basic activity. In case of Haryana this activity dominates all over other activities like secondary and tertiary (in terms of engagement of people). But within the state the economic conditions of farmer vary from district to district. To know the reason behind it economic feasibility of three major crops of all districts has been analyzed with the help of multiplication of yield and whole sale price on average basis in different markets of Haryana. After the analysis it is found that district Fatehabad comes on the top and Rohtak at the bottom in terms of their monetary values. There may be a lot of factors behind this gap but the factors of crop combination and yield (Kg/Hectare) with respect to their price found the major one.*

Key words: Economic Feasibility, Net monetary value, Yield, Crop combination Matrix

Introduction: About 70% population of Haryana is directly or indirectly depends on agriculture. Haryana is known by its agriculture in India.

Wheat is the major crop of Haryana, along with it paddy, sorghum, bajra, gram, cotton, sugarcane, jowar etc. are other major crops. Production and yield per hectare of these crops vary from district to district. Economic feasibility includes the element of input i.e. cost of seed, use of man power, machinery, use of fertilizer and pesticides, harvesting cost, transporting cost etc. on the other hand elements of output includes net monetary value of crops. Here in this study the method of yield $\times$ whole sale average price of crop in market is used to calculate net monetary value and this net value in monetary terms is used to give the rank of feasibility for that crop. The other elements of input-output are taken as constant and it is assumed that choice of farmer for certain crop in a particular area is based on his empirical approach.

Objective of Study: The objective behind this study is to check the economic feasibility of crops in terms of net monetary value for all districts of Haryana.

Data Sources & Methodology: The present study is based on the secondary data taken from various issues of Statistical Abstract of Haryana and Department of Economic & Statistical Analysis of Haryana. Output method in

monetary terms is used to check the feasibility of crops at district level. To view the pattern district are depicted on graph with their monetary value.

Interpretation and Analysis of data: Table 1 shows the following data.

Table 1

District wise major crops with their Area, Production, Yield and Net Monetary value

District	Major Crops	Area ¹	Production ⁴	Yield ⁵	Net Monetary Value ⁶
Ambala	Wheat	86.9	346	3980	4815800
	Rice	82.3	306	3727	4170513
	Sugarcane	9.6	71.4	7137	1463085
Total					10449398
Panchkula	Wheat	15.7	38	2394	2896740
	Rice	8.4	23	2864	3204816
	Maize	602	13	2144	2144000
Total					8245556
Yamuna Nagar	Wheat	85.8	355	4131	4998510
	Rice	73.5	267	3607	4036233
	Sugarcane	25.4	180.9	7237	1483585
Total					10518328
Kurukshetra	Rice	118	453	3843	4300317
	Wheat	114.2	526	4610	5578100
	Sugarcane	13.9	103.8	7416	1520280
Total					11398697
Kaithal	Wheat	171.7	772	4488	5430480
	Rice	158.3	462	2925	3273075
	Sugarcane	2.9	22.5	7503	1538115
Total					10241670
Karnal	Rice	171.5	521	3029	3389451
	Wheat	171.4	773	4518	5466780
	Sugarcane	8	63.7	7964	1632620
Total					10488851
Panipat	Wheat	86.7	387	4451	5385710
	Rice	77	205	2657	2973183
	Sugarcane	4	31.1	7783	1595515

Total					9954408
Sonipat	Wheat	141.4	610	4323	5230830
	Rice	90.2	219	2433	2722527
	Sugarcane	3.7	30.3	7582	1554310
Total					9507667
Rohtak	Wheat	103.7	422	4058	4910180
	Rice	35.1	50	1415	1583385
	Jowar	21	10	500	651000
Total					7144565
Jhajjar	Wheat	101.1	417	4113	4976730
	Mustered	32.9	52	1597	2954450
	Bajra	31	61	1984	1789568
Total					9720748
Faridabad	Wheat	33.9	136	3997	4836370
	Rice	9.6	24	2358	2638602
	Bajra	3.7	6	1421	1281742
Total					8756714
Palwal	Wheat	98.6	409	4127	4993670
	Rice	30.7	85	2752	3079488
	Jowar	7.5	4	500	651000
Total					8724158
Gurgaon	Wheat	51.6	227	4367	5284070
	Bajra	34.2	63	1855	1673210
	Mustered	13.9	25	1783	3298550
Total					10255830
Mewat	Wheat	73.7	301	4061	4913810
	Mustered	28.2	42	1503	2780550
	Bajra	25.6	44	1683	1518066
Total					9212426
Rewari	Mustered	65.2	119	1834	3392900
	Bajra	58.6	97	1645	1483790
	Wheat	48.6	220	4485	5426850
Total					10303540
Mahendergarh	Bajra	103	183	1779	1604658
	Mustered	93.7	145	1541	2850850
	Wheat	40.7	159	3873	4686330
Total					9141838
Bhiwani	Bajra	172.1	181	1055	951610
	Wheat	156.6	561	3594	4348740
	Mustered	138.6	214	1541	2850850
Total					8151230
Jind	Wheat	215.2	934	4344	5256240

	Rice	108.3	296	2745	3071655
	Cotton	46	141	522	1944450
Total					10272345
Hisar	Wheat	225.2	931	4139	5008190
	Cotton	132.8	477	610	2275125
	Mustered	53.5	102	1930	3570500
Total					10850940
Fatehabad	Wheat	185.8	842	4526	5476460
	Cotton	85.8	374	745	2775125
	Rice	81.4	291	3587	4013853
Sirsa	Wheat	279.2	1122	4022	4866620
	Cotton	193.1	801	706	2629850
	Rice	61.4	204	3344	3741936
Total					11238406

Sources: Statistical abstract of Haryana (2010-11) & Department of Economic & Statistical Analyzes Haryana.

Abbreviations: 1 Area taken in '000 Hectare

4 Production taken in '000 Tones

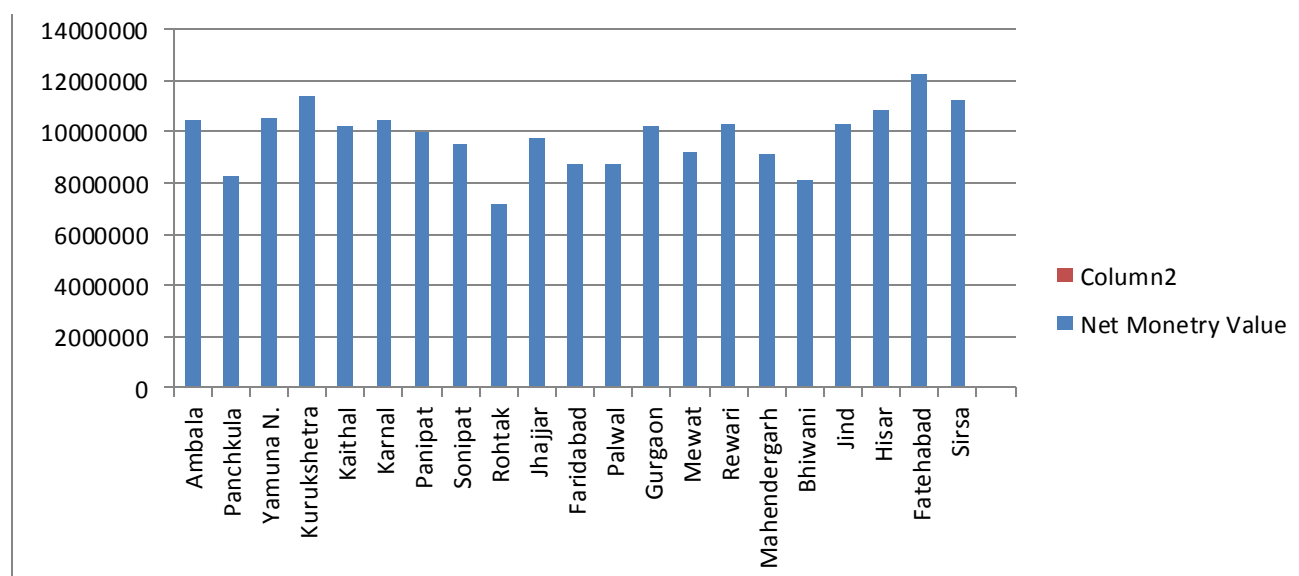
5 Yield taken in Kg/Hectare

6 Net Monetary Value= Yield× Wholesale average price in market (2010-11)

Not: Whole sale price of all commodities are taken as whole digit number by eliminating fraction, price of sugarcane is taken as mid crop price and price of mustered is taken as MSP.

Figure 1

District wise major crops with their Area, Production, Yield and Net Monetary value



X-Axis shows Districts and Y- Axis shows Net Monetary Values

The table is based on the district wise first three major crops, according to their area. Besides this determinant factors like production and yield are also taken. To find out total monetary value yield has been taken as a determinant factor, to eliminate the effect of size/area of cultivation. Table 1 revealed that wheat places themselves in all 21 districts as one of the major crop. The district Fatehabad has highest yield (4526 Kg/Hectare) and Panchkula with a yield value of 2394 Kg/ Hectare lies on the bottom line of wheat production. On the other hand rice is a dominant crop in 14 districts. District Kurukshetra (3843 Kg/Hectare) has the highest yield and Rohtak (1415 Kg/Hectare) has the lowest one. Districts of Northern Haryana like Ambala, Kurukshetra, Kaithal, Karnal, Jind etc which have better source of irrigation dominate in wheat, rice and sugarcane while district of Southern Haryana like Mahendergarh, Rewari, Bhiwani, Gurgaon, Jhajjar etc dominate in water resistant crops like bajra, mustered & rape seeds etc. because of scarcity of water in these district. The Western part of state include cotton as there major crops along with rice. In terms of total monetary value figure 1 shows that district Fatehabad with a total monetary value of 12265438 leads to all districts and it can be analyzed that crop combination and better fertility (use of methods which enhance it) play the important role to place the district at top. One the other hand district Rohtak with a total

monetary value of 7144565 lies on the bottom of graph.

Conclusion & Recommendations:

It is true fact that Haryana is a developed state in terms of agriculture and reflect a clear image of the success of Green Revolution experiment. But within the state at district level a total gap of 5120873 monetary values found over there. It is a huge difference. There are various reasons behind it i.e. irrigation deficiency, fertility level of land etc. but the most important factor is crop combination matrix. So to overcome from this deficiency cultivation of case crops would be more economic feasible method, besides this use of HYV seeds, replacement level of seeds should be increased, to get better yield, fertility of soil should be improved by adopting more scientific method, so that the net monetary value can be enhanced and condition of farmer can become more economic sound.

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