

# Agriculture Cropping Pattern Change Due to Economic Standard Reforms (A Case Study on South East Hisar District, Haryana, Villages)

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**Abstract** – By this research paper we want to explain that agriculture cropping pattern system is changing in India as well as Hisar (Haryana) year to year for growing his income standard. They are excessive use of fertilizer and ground water that is not proper applicable for his cash crops. We find that in this study area 90 % farmer take mainly two crops in a year that is Paddy and Wheat.

By Ch. Charan Singh Haryana Agriculture University's Water and Soil Department lab report display to this study area testing report that study area is carrying capacity of different crops like as horticulture, floriculture, cotton, rice, wheat, maize, barley and sugar cane etc.

All farmers of this area is not aware for future productivity and harmful effect on our health. So by this research paper we want to aware to all farmers that excessive use of weedicides, pesticides and fertilizer that will change to the water composition decrease to soil fertility. Thus by this progressive farmer "s tendency that time is not far away that their cultivated land will convert in barren land

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## INTRODUCTION

Field work is a vital instrument for understanding the world through direct experience. It is the process of observing and collecting data about people, cultures and natural environment. Field work is the heart in geographical study, if we go to field and surveying about that matter then we can never forget that experience because that imprint on our mind. Various geographers like Herodotus, Humboldt and D. Stamp etc. have proved the importance of field work from time to time.

We are explain by this paper that agriculture cropping pattern is changing time to time in ever where.

**Agriculture** is such a type activity that fulfill to all human being and livestock.

**Cropping pattern** is a yearly sequence and spatial arrangement of crops in a particular given area.



## STUDY AREA

The study deals with the changing of agriculture cropping pattern in India as well as Hisar (Haryana).

Here our main focus is on Hisar district, which is located in west direction of Haryana state. South & South-East direction of Hisar is low fertility due to desertification and middle, North, North-West direction is very rich sector in agriculture production due to its physical condition. In this study area 154 village, 4 tehsil and 9 block in this district.

## OBJECTIVE

- To know the maximum concentration of the crops in this study area.

- To know underground water table on which depth in every direction of study area.
- To identify the canal irrigation is require in which direction of study area.
- To know P.H. (Potential Hydrogen) values of soil and water of this region.
- To highlight the cropping pattern of agriculture adopted by these farmers. Is that applicable towards to water and soil fertility?

**METHODOLOGY**

Research methodology is main part of any research project. Our research is mainly on based on primary data. we take some samples in different direction and distance of this study field and tested by C.C.H.A.U. Hisar . Study area map is interpreted by hand work with help of cadastral map to patwar office.



**Map. Location of Hisar**

**Sample information to different direction to the Sindhar village**

Sample No.	Land Owner	Village	Water source	Depth	Sample distance to sindhar village
1	Jyalal	Singwa Ragho (S2)	Handpump	30	6.5
2	Sandeep	Barwala (B1)	Tubewell	35	15.0
3	Tekram	Lohari (L)	Well	22	19.0
4	Omparkash	Rajli (R)	Tubewell	40	7.0
5	Naresh	Narnaund (N)	Tubewell	25	31.0
6	Balram	Sisaaye (S3)	Tubewell	30	29.0
7	Vikram	Sindhra (S1)	Well	18	2.0
8	Krishan	Khanpur (K)	Handpump	22	5.0
9	Baldev	Ghiray (G)	Tubewell	35	7.5
10	Dalip	Mirjapur (M2)	Handpump	24	16.5
11	Jagdeep	Hansi (H)	Well	23	28.0
12	Gurnaam	Dhansu (D)	Tubewell	45	14.0
13	Ranbir	Byana Khera (B2)	Tubewell	35	14.5
14	Palaram	Masudpur (M1)	Tubewell	40	4

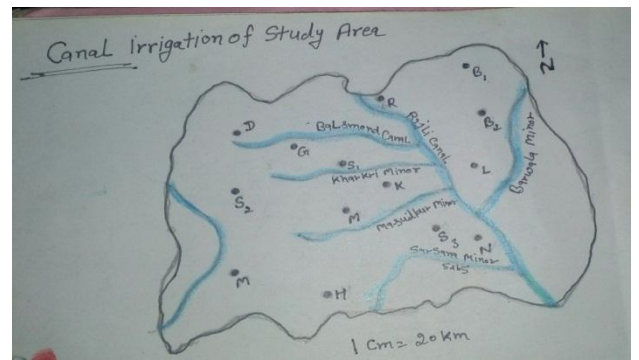
Source: Primary Data of Hisar district 2017

**C.C.S.H.A.U. Hisar Lab report**

Sample No.	Lab No.	EC*10 <sup>6</sup>	CL	Ca	Ca+Mg	HCO3	Suggestive class
1	HA-1	420	2.0	1.0	2.5	2.0	A1
2	HA-2	1460	4.0	3.0	8.0	6.0	A2
3	HA-3	3920	16.0	7.0	20.0	4.0	B2
4	HA-4	1620	4.0	4.0	11.0	6.0	A3
5	HA-5	530	2.0	1.2	3.0	2.0	A1
6	HA-6	500	2.0	2.0	5.0	2.0	A1
7	HA-7	1400	6.0	3.2	9.0	6.0	A2
8	HA-8	430	2.0	1.2	3.0	2.0	A1
9	HA-9	1430	4.0	3.2	9.0	4.0	A2
10	HA-10	3620	1.0	6.0	17.0	6.0	B1
11	HA-11	620	2.0	2.2	6.0	3.0	A1
12	HA-12	600	2.0	1.2	3.0	2.0	A1
13	HA-13	1940	2.0	6.0	17.0	4.0	A3
14	HA-14	2750	8.0	4.5	13.0	6.0	B1

Source: Analysis Report by C.C.S.H.A.U. Hisar (Haryana) 2017

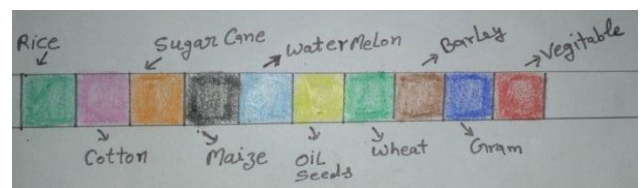
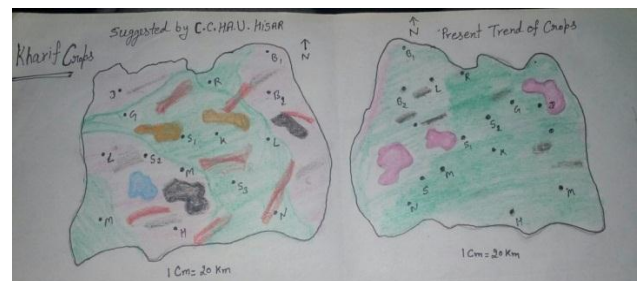
**Drainage pattern of study area**



**Rabi Crops trend**



**Kharif Crops trend**



### Study area cropping pattern scenario Hisar

In modern time period, man's capitalistic thinking is growing day by day and he wants every time more and more production. After research we find that in this study area paddy is grown approximately 93 % in Kharif season although their Paddy should be grown approximately 43% and some other crops should be grown according C.C.S.H.A.U.HISAR such as Cotton crops, Jowar, Soyabean and Maize etc.

And in Rabi season major crops is grown wheat due to heavy consumption and other all crops is ignorant.

### CONCLUSION

- We find out in this study area in Kharif season mainly Paddy is grown approximately above 90% and remained areas is covered by cotton crop. And in Rabi season maximum wheat is grown approximately above 85% areas and remained areas is covered by oilseed and barley crops.
- Over all depth of water table in mid of study area is approximately 23-25 feet and in north-west between approximately 35-45 feet and south-west and south-east is carrying to water table approximately to 20 ft.
- Due to lack of canal irrigation 38 % cultivated land of this study area is suffering to low productivity .So there should be maximum effort in south-east and north-east direction of study zone by government and his strong good will can be reforms to these farmer 's future.
- In this study area approximately 15 % cultivated land is suitable for horticulture, floriculture and vegetables. These crops can give more benefit to these farmers because this study area is lies in 15 to 25 km in radius of the market.
- PH (potential hydrogen) value of this study field is on normal stage that not effect to productivity.
- Farmers of this area scan reforms his economic condition if they implement all crops in his cultivated areas ex. If they grow vegetable in suggested areas they can take more and more productivity and more wealth.

We find that in this study area that soil and water quality to giving us a message that in this area can be maximum crop diversification .But these farmers use mainly two crops Wheat and Rice. This cyclic

process of these two crops will destroy to fertility in some year ago.

### REFERENCES

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