

# Trends of Vegetable Crops in Haryana

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## INTRODUCTION

In our country, majority of population is living in villages and depends on agriculture sector. Vegetables are rich source of vitamins, minerals and plant fibers which provide food and nutritional securities. These also generate high income and employment, particularly for small farmers. In state Haryana, there were wide changes climate and soil, is highly favorable for growing a large number of vegetable crops. It is the rapidly growing sector with in agriculture. It contributes in poverty alleviation, nutritional security and have large scope for farmers to extension their income and helpful in sustaining large number of agro-based industries which generate greater employment opportunities. There are many type of vegetable produced in India like potato, onion, tomato, radish, carrot, cabbage etc. There are various crop are produced in Haryana like brinjal, cauliflower, chilies, carrot, radish etc. we want to see the position of vegetable crop of Haryana state.

## Objective of the Study

- ❖ To estimate trends of vegetable crop in Haryana during 2002-03 to 2012-13.

## Research Methodology

The present study is based on secondary data. The present study utilizes the time series data on area, production and productivity of all vegetables crops in Haryana. Secondary data gathered from Horticulture department of Haryana and National Horticulture Board. The present study utilizes the time series data on area and production. The study computed by Compound Annual Growth Rate.

**Table: 1: Trends in Area, Production and Productivity of Potato in Haryana**

Year	Area in Hectare	Production in Tonnes	Productivity
2003-2004	16402	170109	10.37
2004-2005	16445	164947	10.03
2005-2006	20607	186039	9.02
2006-2007	25428	229495	9.02
2007-2008	19497	208453	10.69
2008-2009	25606	221337	8.64
2009-2010	25097	236916	9.44
2010-2011	28516	235249	8.24
2011-2012	29698	278488	9.37
2012-2013	30977	270268	8.72
CAGR	7%	5%	-2%

Source: Department of Horticulture (Haryana), Various Years

The table 1 shows that the trends in area, production and productivity of potato crop during 2003-04 to 2012-13. The area & production of potato has increased from 16402 to 30977 Hectare and 170109 to 270268 MT (Metric Tone) during 2003-04 to 2012-13 respectively. The table shows the productivity of potato, which has decreased from 10.37 to 8.72 during the same time period. It shows that the performance of potato not good in Haryana. Table also shows the CAGR of area and production of potato is 7 percent and 5% respectively production during the study time period. The CAGR of productivity of potato is -2%. It shows that the productivity of potato has decreased during the year 2003-04 to 2012-13.

**Table: 2**  
**Trends in Area, Production and Productivity of Onion in Haryana**

Year	Area in Hectare	Production in Tonnes	Productivity
2003-2004	19897	294650	14.80
2004-2005	17179	352967	20.54
2005-2006	15494	317699	20.50
2006-2007	16430	314910	19.16
2007-2008	17747	346614	19.53
2008-2009	18796	347942	18.51
2009-2010	18440	364002	19.73
2010-2011	22160	453862	20.48
2011-2012	27448	589830	21.48
2012-2013	27800	604469	21.74
CAGR	3%	7%	4%

Source: Department of Horticulture (Haryana), Various Years

Table 2 shows that trends in area, production and productivity of onion in Haryana for the year 2003-04 to 2012-13. The area for onion increased from 19897 ha to 27800 ha during (2003-04 to 2012-13). The production of onion also increased from 294650 MT to 604469 MT during the study time period. The productivity is tremendously increased from 14.80 percent per hectare in year 2003-04 to 21.74 percent in year 2012-13.

**Table: 3**  
**Trends in Area, Production and Productivity of Tomato in Haryana**

Year	Area in Hectare	Production in Tonnes	Productivity
2003-2004	14036	222815	15.87
2004-2005	13760	219701	15.96
2005-2006	17116	257282	15.03
2006-2007	22533	258758	11.48
2007-2008	19182	202329	10.54

<b>2008-2009</b>	22041	316267	14.34
<b>2009-2010</b>	22606	379828	16.80
<b>2010-2011</b>	27225	392362	14.41
<b>2011-2012</b>	27070	417443	15.42
<b>2012-2013</b>	27605	400811	14.51
<b>CAGR</b>	7%	6%	-1%

Source: Department of Horticulture (Haryana), Various Years

Table 3 indicate that the trends in area, production and productivity of tomato in Haryana for the year 2003-04 to 2012-13. The area of production of tomato is 14036 in 2003-04 and 27605 in 2012-13. It show highly increased in the area of tomato crop. The production of tomato also rapidly increased from 222815 in 2003-04 to 400811 MT in 2012-13. The productivity of tomato has decreased by 1.36 percent in year 2012-13 as compared to 2003-04. The CAGR of area of tomato is 7 percent, production is 6 percent and productivity is only -1 percent.

**Table: 4**  
**Trends in Area, Production and Productivity of Carrot in Haryana**

<b>Year</b>	<b>Area in Hectare</b>	<b>Production in Tonnes</b>	<b>Productivity</b>
<b>2003-2004</b>	11613	194837	16.77
<b>2004-2005</b>	14795	232225	15.69
<b>2005-2006</b>	15292	249985	16.34
<b>2006-2007</b>	19342	282954	14.62
<b>2007-2008</b>	16475	266418	16.17
<b>2008-2009</b>	17011	271907	15.98
<b>2009-2010</b>	17381	279495	16.08
<b>2010-2011</b>	19527	314840	16.1
<b>2011-2012</b>	18869	366643	19.43
<b>2012-2013</b>	18476	286118	15.48
<b>CAGR</b>	5%	4%	-0.007

Source: Department of Horticulture (Haryana), Various Years

Table 4 reveals that trends in area, production and productivity of carrot in Haryana during the year 2003-04 to 2012-13. The area of carrot increased by 6863 hectare (18476 – 11613) from 2003-04 to 2012-13. The production of carrot increased with the increased in area, the total production increased of carrot by 91281 MT (286118 – 194837) during the study time period. Despite increased in area and production of carrot, the productivity is decreased by 00.50% per hectare (2003-04 to 2012-13). The performance of carrot in terms of productivity per hectare is not much good during 2003-04 to 2012-13.

**Table: 5**  
**Trends in Area, Production and Productivity of Cabbage in Haryana**

Year	Area in Hectare	Production in Tonnes	Productivity
2003-2004	9069	118025	13.01
2004-2005	10398	165311	15.89
2005-2006	12341	172233	13.95
2006-2007	10827	172885	15.96
2007-2008	11349	152635	13.44
2008-2009	11154	214204	19.20
2009-2010	12230	218258	17.84
2010-2011	13783	262381	19.03
2011-2012	14065	269752	19.17
2012-2013	14815	270376	18.25
CAGR	0.05	0.08	0.034

Source: Department of Horticulture (Haryana), Various Years

Table 5 reveals that trends in area, production and productivity of cabbage in Haryana during the year 2003-04 to 2012-13. The area of cabbage increased by 5746 ha (14815 – 9069) for the year 2003-04 to 2012-13. The production of cabbage also increased with the increased in area, the total production of cabbage increased by 152351 MT (270376 -118025) during the study time period. Despite increased in area and production of cabbage, the maximum average productivity of cabbage increased by 3.57 percent per hectare (16.58 – 13.01) during the same time period. The performance of cabbage in terms of productivity is good during 2003-04 to 2012-13. The CAGR of cabbage sustained around 0.034 percent during the study time period.

**Table: 6**  
**Trends in Area, Production and Productivity of Cauliflower in Haryana**

Year	Area in Hectare	Production in Tonnes	Productivity
2003-2004	17780	281310	15.82
2004-2005	16977	268812	15.83
2005-2006	20995	302759	14.42
2006-2007	30324	417197	13.75
2007-2008	24231	349891	14.43

<b>2008-2009</b>	25873	500336	19.33
<b>2009-2010</b>	25699	487689	18.97
<b>2010-2011</b>	30276	531920	17.56
<b>2011-2012</b>	29946	584277	19.51
<b>2012-2013</b>	30442	492264	16.17
<b>CAGR</b>	6%	6%	0%

Source: Department of Horticulture (Haryana), Various Years

Table 6 shows that the trends in area, production and productivity of cauliflower in Haryana, during the year 2003-04 to 2012-13. The area and production of cauliflower fall from 17780 in year 2003-04 to 16977 in year 2004-05 and 281310 MT in year 2003-04 to 268812 MT in 2004-05 respectively. The area and production of cauliflower has tremendously high from 16977 ha to 30324 ha during the period 2004-05 to 2006-07 and 268812 MT to 417197 MT during the same time period respectively. The productivity of cauliflower has less increased 15.83 to 16.17 during the study time period. The CAGR of cauliflower in area and production is same 6 percent during 2003-04 to 2012-13.

**Table: 7**  
**Trends in Area, Production and Productivity of Chilies in Haryana**

<b>Year</b>	<b>Area in Hectare</b>	<b>Production in Tonnes</b>	<b>Productivity</b>
<b>2003-2004</b>	7958	61014	7.66
<b>2004-2005</b>	7949	66728	8.39
<b>2005-2006</b>	9308	67958	7.30
<b>2006-2007</b>	12319	102876	8.35
<b>2007-2008</b>	10687	114359	10.70
<b>2008-2009</b>	13105	101652	7.75
<b>2009-2010</b>	11920	117988	9.89
<b>2010-2011</b>	14155	129166	9.12
<b>2011-2012</b>	15128	126431	8.35
<b>2012-2013</b>	15922	146647	9.21
<b>CAGR</b>	7%	9%	2%

Source: Department of Horticulture (Haryana), Various Years

Table 7 reveals that the trends in area, production and productivity of chillies in Haryana, for the year 2003-04 to 2012-13. The area and production of chillies decreased from 7958 in 2003-04 to 7949 in 2004-05 and production from 61014 MT in 2003-04 to 66728 MT in 2004-05 respectively. The area and production of chillies sharply increase from 7949 to 12319 and from 66728 to 102876 during the year 2004-05 to 2006-07 respectively. The productivity of chillies has less increased 7.66 to 9.21. The CAGR of chillies has 7% in area and 9% in production and 2% in productivity during the study time period.

**Table: 8**  
**Trends in Area, Production and Productivity of Brinjal in Haryana**

Year	Area in Hectare	Production in Tonnes	Productivity
<b>2003-2004</b>	10490	166000	15.82
<b>2004-2005</b>	10707	174559	16.30
<b>2005-2006</b>	11462	148709	12.97
<b>2006-2007</b>	15675	184128	11.74
<b>2007-2008</b>	13451	173744	12.91
<b>2008-2009</b>	13306	232313	17.45
<b>2009-2010</b>	12956	143243	11.05
<b>2010-2011</b>	14645	255228	17.42
<b>2011-2012</b>	17808	281510	15.80
<b>2012-2013</b>	18291	302888	16.55
<b>CAGR</b>	6%	6%	0%

Source: Department of Horticulture (Haryana), Various Years

Table 8 shows that the trends in area, production and productivity of Brinjal in Haryana during the year 2003-04 to 2012-13. The area of brinjal has increased by 7801 (18291 – 10490) during (2003-04 to 2012-13) and production of brinjal has extremely increased by 136888 MT (302888 – 166000) respectively during the study time period. The average productivity of brinjal is 14.80%. The CAGR of brinjal in area, production and productivity is 6%, 6% and 0% during the same period. The performance of brinjal in productivity is not good during the same period.

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