



Performance of Agriculture Sector in Punjab and Haryana

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Abstract

Agriculture is the main stay of Indian economy. Northern states contributed maximum to national food grains pool i.e. Uttar Pradesh, Punjab and Haryana. Punjab and Haryana are geographically blessed with rich source of irrigation by Himalayan Rivers. Both the states have achieved the highest rank in per capita income. In the present research paper an attempt has been made to examine the performance of agriculture in Haryana and Punjab. Secondary sources of data have been used in this paper collected from various published and unpublished sources. The study concludes that both the states were contributed maximum in national pool of wheat and rice. The states contributed around 15 per cent in case of rice while in case of wheat it was around 30 per cent for the year 2014-15.

Key Words: *Agriculture, Wheat, Rice, Production, Area.*

Introduction:

Both Punjab and Haryana are the northern states of India. Punjab state covers an area of 50,362 square kilometers which is 1.53 percent of the total geographical area of India and with 27,704,236 inhabitants at the 2011 census; Punjab is the sixteenth largest state by population, comprising 22 districts. Whereas Haryana carved out of the former state of East Punjab on 1 November 1966 on linguistic basis, with less than 1.4 per cent (44,212 sq km) of India's geographical area. Punjab and Haryana States, both are primarily agriculture-based due to the presence of water sources and fertile soils. These states having major industries include the manufacturing of scientific instruments, agricultural goods, electrical goods, financial services, machine tools, sewing machine, sports goods, starch, tourism, fertilizers, bicycles, garments and the processing of pine oil and sugar.

The GDP of the Punjab are Rs.3.17 lakh crore (US\$47 billion). This region is ideal for wheat-growing. Rice, sugar cane, fruits and vegetables are also grown. Punjab is called the



"Granary of India" or "India's bread-basket". It produces 10.26 per cent of India's cotton, 19.5 per cent of India's wheat, and 11 per cent of India's rice. The largest cultivated crop is wheat. Other important crops are rice, cotton, sugarcane, pearl millet, maize, barley and fruit. Rice and wheat are double cropped in Punjab with rice stalks being burned off over millions of acres prior to the planting of wheat. This widespread practice is polluting and wasteful.

In Punjab, the consumption of fertilizers per hectare is 223.46 kg as compared to 90 kg nationally. The state has been awarded the National Productivity Award for agriculture extension services for ten years, from 1991–92 to 1998–99 and from 2001 to 2003–04. In recent years a drop in productivity has been observed, mainly due to falling fertility of the soil. This is believed to be due to excessive use of fertilizers and pesticides over the years. Another worry is the rapidly falling water-table on which almost 90 per cent of the agriculture depends; alarming drops have been witnessed in recent years. By some estimates, groundwater is falling by a meter or more per year. According to the India State Hunger Index 2017 (ISHI 2017), Punjab has the lowest level of hunger in India.

Haryana has the India's third highest per capita income at ₹ 214,509 (US\$3,400) against the national average of ₹ 112,432 (US\$1,800) in year 2016–17. Haryana's 2017-18 estimated state GSDP of US\$95 billion (52 per cent services, 30 per cent industries and 18 per cent agriculture) is growing at 12.96 per cent 2012-17 CAGR and placed on the 14th position behind only much bigger states, is also boosted by 30 SEZs (mainly along DMIC, ADKIC and DWPE in NCR), 7 per cent national agricultural exports, 60 per cent of national Basmati rice export, 67 per cent cars, 60 per cent motorbikes, 50 per cent tractors and 50 per cent refrigerators produced in India. In services, Gurugram ranks number one in India in IT sector growth rate and existing technology infrastructure, and number two in startup ecosystem, innovation and livability (Nov 2016). Haryana is 14th placed 12.96 per cent 2012-17 CAGR estimated 2017-18 GSDP of US\$95 billion is split in to 52 per cent services, 30 per cent industries and 18 per cent agriculture. Services sector is split across 45 per cent in real estate and financial & professional services, 26 per cent trade and hospitality, 15 per cent state and central government employees, and 14 per cent transport and logistics & warehousing. In IT services, Gurugram ranks number one in India in growth rate and existing technology infrastructure, and number 2 in startup ecosystem, innovation and livability

(Nov 2016). Industrial sector is split across 69 per cent manufacturing, 28 per cent construction, 2 per cent utilities and 1 per cent mining. In industrial manufacturing, Haryana produces India's 67 per cent of passenger cars, 60 per cent of motorcycles, 50 per cent of tractors and 50 per cent of the refrigerators. Services and industrial sectors are boosted by 7 operational SEZs and additional 23 formally approved SEZs (20 already notified and 3 in-principal approval) that are mostly spread along the Delhi–Mumbai Industrial Corridor, Amritsar Delhi Kolkata Industrial Corridor and Delhi Western Peripheral Expressway in NCR).

Haryana is traditionally an agrarian society of zamindars (owner-cultivator farmers). The Green Revolution of 1960s in Haryana combined with completion of Bhakra Dam in 1963 and Western Yamuna Command Network canal system in 1970s resulted in the significantly increased food grain production. Agriculture sector is split across 93 per cent crops and livestock, 4 per cent commercial forestry and logging, and 2 per cent fisheries. Agriculture sector of Haryana, with only less than 1.4 per cent area of India, contributes 15 per cent food grains to the central food security public distribution system, and 7 per cent of total national agricultural exports including 60 per cent of total national Basmati rice export. In 2015-2016, Haryana produced the following principal crops: 13,352,000 tonnes wheat, 4,145,000 tonnes rice, 7,169,000 tonnes sugarcane, 993,000 tonnes cotton and 855,000 tonnes oilseeds (mustard seed, sunflower, etc).

Fruits, vegetables and spices

Vegetable production was: Potato 853,806 tonnes, Onion 705,795 tonnes, Tomato 675,384 tonnes, Cauliflower 578,953 tonnes, Leafy Vegetables 370,646 tonnes, Brinjal 331,169 tonnes, gourd 307,793 tonnes, Peas 111,081 tonnes and others 269,993 tonnes. Fruits production was: Citrus 301,764 tonnes, Guava 152,184 tonnes, Mango 89,965 tonnes, Chikoo 16,022 tonnes, Aonla 12,056 tonnes and other fruits 25,848 tonnes. Spices production was: Garlic 40,497 tonnes, Fenugreek 9,348 tonnes, Ginger 4,304 tonnes and others 840 tonnes.

Flowers and medicinal plants

Cut flowers production was: Marigold 61,830 tonnes, Gladiolus 24,486,200 lakh, Rose 18,611,600 lakh, and other 6,913,000 lakh. Medicinal plants production was: Alovera 1403 tonnes and Stevia 13 tonnes.

Livestock

Haryana is well known for its high-yield Murrah buffalo. Other breeds of cattle native to Haryana are Haryanvi, Mewati, Sahiwal and Nili-Ravi.

Result and Discussion:

Table No.-1
PATTERN OF LAND USE

(Thousand Hectares)

| Year | Haryana | per cent Share of Haryana | Punjab | % Share of Punjab | ALL INDIA | Year | Haryana | % Share of Haryana | Punjab | % Share of Punjab | ALL INDIA |
|---------|---------|---------------------------|--------|-------------------|-----------|---------|---------|--------------------|--------|-------------------|-----------|
| 1990-91 | 5919 | 3.19 | 7501 | 4.04 | 185742 | 2002-03 | 6032 | 3.47 | 7773 | 4.47 | 173889 |
| 1991-92 | 5570 | 3.06 | 7518 | 4.13 | 182241 | 2003-04 | 6388 | 3.37 | 7907 | 4.17 | 189661 |
| 1992-93 | 5852 | 3.15 | 7552 | 4.07 | 185618 | 2004-05 | 6425 | 3.36 | 7931 | 4.15 | 191103 |
| 1993-94 | 5815 | 3.12 | 7623 | 4.09 | 186595 | 2005-06 | 6504 | 3.37 | 7868 | 4.08 | 192737 |
| 1994-95 | 5963 | 3.17 | 7693 | 4.09 | 188053 | 2006-07 | 6394 | 3.32 | 7861 | 4.09 | 192381 |
| 1995-96 | 5974 | 3.19 | 7752 | 4.14 | 187471 | 2007-08 | 6458 | 3.31 | 7870 | 4.03 | 195223 |
| 1996-97 | 6074 | 3.21 | 7808 | 4.12 | 189502 | 2008-09 | 6484 | 3.32 | 7912 | 4.05 | 195328 |
| 1997-98 | 6143 | 3.23 | 7831 | 4.12 | 189988 | 2009-10 | 6351 | 3.36 | 7875 | 4.17 | 189002 |
| 1998-99 | 6320 | 3.30 | 7945 | 4.15 | 191649 | 2010-11 | 6505 | 3.29 | 7883 | 3.99 | 197563 |
| 1999-00 | 6029 | 3.20 | 7847 | 4.17 | 188396 | 2011-12 | 6489 | 3.32 | 7905 | 4.04 | 195632 |
| 2000-01 | 6115 | 3.30 | 7941 | 4.28 | 185340 | 2012-13 | 6376 | 3.28 | 7870 | 4.05 | 194399 |
| 2001-02 | 6318 | 3.36 | 7941 | 4.22 | 188014 | 2013-14 | 6471 | 3.22 | 7848 | 3.91 | 200859 |

Source: Ministry of Agriculture and Farmers Welfare, Government of India

The table no 1 shows that the land use area in both the states from 1990-91 to 2013-14. The land use pattern of Haryana is 3.19 percent in 1990-91 to 3.22 in 2013-14 of whereas in Punjab this figure is 4.04 percent to 3.91 percent in the same time period. In the land use pattern, Punjab state used almost one percent more than Haryana.

Table No.-2
PATTERN OF LAND USE - NET SOWN AREA

(Thousand Hectares)

| Year | Haryana | % Share of Haryana | Punjab | % Share of Punjab | ALL INDIA | Year | Haryana | % Share of Haryana | Punjab | % Share of Punjab | ALL INDIA |
|---------|---------|--------------------|--------|-------------------|-----------|---------|---------|--------------------|--------|-------------------|-----------|
| 1990-91 | 3575 | 2.5 | 4217 | 2.95 | 142870 | 2002-03 | 3458 | 2.62 | 4201 | 3.18 | 131943 |
| 1991-92 | 3508 | 2.48 | 4215 | 2.98 | 141632 | 2003-04 | 3534 | 2.51 | 4240 | 3.01 | 140708 |

| | | | | | | | | | | | |
|---------|------|------|------|------|--------|---------|------|------|------|------|--------|
| 1992-93 | 3474 | 2.44 | 4139 | 2.9 | 142645 | 2004-05 | 3527 | 2.51 | 4200 | 2.99 | 140642 |
| 1993-94 | 3513 | 2.47 | 4214 | 2.96 | 142419 | 2005-06 | 3566 | 2.53 | 4192 | 2.97 | 141162 |
| 1994-95 | 3559 | 2.49 | 4210 | 2.94 | 142960 | 2006-07 | 3556 | 2.54 | 4184 | 2.99 | 139823 |
| 1995-96 | 3586 | 2.52 | 4139 | 2.91 | 142197 | 2007-08 | 3594 | 2.55 | 4187 | 2.97 | 141016 |
| 1996-97 | 3615 | 2.53 | 4223 | 2.95 | 142931 | 2008-09 | 3576 | 2.52 | 4169 | 2.94 | 141899 |
| 1997-98 | 3635 | 2.56 | 4238 | 2.99 | 141945 | 2009-10 | 3550 | 2.55 | 4158 | 2.99 | 139173 |
| 1998-99 | 3628 | 2.54 | 4264 | 2.99 | 142753 | 2010-11 | 3518 | 2.49 | 4158 | 2.94 | 141563 |
| 1999-00 | 3552 | 2.52 | 4210 | 2.98 | 141063 | 2011-12 | 3513 | 2.49 | 4134 | 2.93 | 140974 |
| 2000-01 | 3526 | 2.49 | 4250 | 3.01 | 141336 | 2012-13 | 3513 | 2.51 | 4150 | 2.97 | 139932 |
| 2001-02 | 3566 | 2.53 | 4254 | 3.02 | 140734 | 2013-14 | 3497 | 2.47 | 4145 | 2.93 | 141428 |

Source: Ministry of Agriculture and Farmers Welfare, Government of India

The table no 2 shows the net sown area of Punjab and Haryana. At the Indian level, the share of Haryana in net shown area is approximately 2.50 percent throughout the study period but in Punjab, it is approximately 2.90 percent. The percentage of net sown area is higher in Punjab than that of Haryana and the reason may be the more land area in Punjab.

Table No.-3

PATTERN OF LAND USE - GROSS IRRIGATED AREA

(Thousand Hectares)

| Year | Haryana | % Share of Haryana | Punjab | % Share of Punjab | ALL INDIA | Year | Haryana | % Share of Haryana | Punjab | % Share of Punjab | ALL INDIA |
|---------|---------|--------------------|--------|-------------------|-----------|---------|---------|--------------------|--------|-------------------|-----------|
| 1990-91 | 4237 | 6.7 | 7055 | 11.16 | 63204 | 2002-03 | 5199 | 7.12 | 7543 | 10.33 | 73055 |
| 1991-92 | 4340 | 6.61 | 7111 | 10.83 | 65680 | 2003-04 | 5343 | 6.85 | 7722 | 9.89 | 78042 |
| 1992-93 | 4472 | 6.7 | 7142 | 10.70 | 66761 | 2004-05 | 5434 | 6.7 | 7702 | 9.50 | 81078 |
| 1993-94 | 4515 | 6.61 | 7238 | 10.60 | 68254 | 2005-06 | 5446 | 6.46 | 7680 | 9.11 | 84280 |
| 1994-95 | 4592 | 6.5 | 7319 | 10.36 | 70646 | 2006-07 | 5461 | 6.29 | 7666 | 8.84 | 86753 |
| 1995-96 | 4673 | 6.55 | 7377 | 10.34 | 71352 | 2007-08 | 5553 | 6.31 | 7689 | 8.73 | 88058 |
| 1996-97 | 4785 | 6.29 | 7453 | 9.80 | 76026 | 2008-09 | 5528 | 6.22 | 7724 | 8.69 | 88896 |
| 1997-98 | 4829 | 6.38 | 7485 | 9.89 | 75670 | 2009-10 | 5545 | 6.52 | 7714 | 9.07 | 85085 |
| 1998-99 | 5042 | 6.41 | 7723 | 9.82 | 78670 | 2010-11 | 5543 | 6.24 | 7724 | 8.69 | 88887 |
| 1999-00 | 5124 | 6.47 | 7544 | 9.52 | 79216 | 2011-12 | 5680 | 6.19 | 7771 | 8.47 | 91730 |
| 2000-01 | 5223 | 6.86 | 7664 | 10.06 | 76187 | 2012-13 | 5672 | 6.13 | 7744 | 8.37 | 92575 |
| 2001-02 | 5311 | 6.78 | 7667 | 9.78 | 78371 | 2013-14 | 5708 | 5.96 | 7732 | 8.07 | 95772 |

Source: Ministry of Agriculture and Farmers Welfare, Government of India

This table depicts the pattern of land use – gross irrigated area in both the states. In the state of Haryana, almost 6.75 percent area is irrigated while in Punjab state this fluctuated i.e. 8.07 to

11.16 percent. Punjab has more irrigated area in comparison to Haryana due to more natural resources.

Table No.-4

PATTERN OF LAND USE - CROPPING INTENSITY

(In Percent)

| Year | Haryana | Punjab | ALL INDIA | Year | Haryana | Punjab | ALL INDIA |
|---------|---------|--------|-----------|---------|---------|--------|-----------|
| 1990-91 | 165.6 | 177.9 | 130 | 2002-03 | 174.4 | 185 | 131.8 |
| 1991-92 | 158.8 | 178.4 | 128.7 | 2003-04 | 180.8 | 186.5 | 134.8 |
| 1992-93 | 168.5 | 182.5 | 130.1 | 2004-05 | 182.2 | 188.8 | 135.9 |
| 1993-94 | 165.5 | 180.9 | 131 | 2005-06 | 182.4 | 187.7 | 136.5 |
| 1994-95 | 167.5 | 182.7 | 131.5 | 2006-07 | 179.8 | 187.9 | 137.6 |
| 1995-96 | 166.6 | 187.3 | 131.8 | 2007-08 | 179.7 | 188 | 138.4 |
| 1996-97 | 168 | 184.9 | 132.6 | 2008-09 | 181.3 | 189.8 | 137.7 |
| 1997-98 | 169 | 184.8 | 133.8 | 2009-10 | 178.9 | 189.4 | 135.8 |
| 1998-99 | 174.2 | 186.3 | 134.3 | 2010-11 | 184.9 | 189.6 | 139.6 |
| 1999-00 | 169.8 | 186.4 | 133.6 | 2011-12 | 184.7 | 191.2 | 138.8 |
| 2000-01 | 173.4 | 186.8 | 131.1 | 2012-13 | 181.5 | 189.6 | 138.9 |
| 2001-02 | 117.2 | 186.7 | 133.6 | 2013-14 | 185 | 189.3 | 142 |

Source: Ministry of Agriculture and Farmers Welfare, Government of India

The table no. 4 shows the crop intensity in both the states and also at Indian level. The crop intensity at Indian level is 130 to 140 while it is 165 to 185 in Haryana and in Punjab 177 to 189 under the study period. It shows that the crop intensity is high in Punjab in comparison to Haryana and at India level.

Table no-5

PRODUCTION OF FOODGRAINS - TOTAL FOODGRAINS

Thousand tonnes

| Year | Haryana | % Share of Haryana | Punjab | % Share of Punjab | ALL INDIA | Year | Haryana | % Share of Haryana | Punjab | % Share of Punjab | ALL INDIA |
|---------|---------|--------------------|--------|-------------------|-----------|---------|---------|--------------------|--------|-------------------|-----------|
| 1991-92 | 9109.4 | 5.2 | 19684 | 11.3 | 173877 | 2003-04 | 13193.1 | 6.2 | 24729 | 11.6 | 213189 |
| 1992-93 | 10267.2 | 5.5 | 20054 | 10.8 | 185171 | 2004-05 | 13109 | 6.6 | 25671 | 12.9 | 198363 |
| 1993-94 | 10268 | 5.4 | 21632 | 11.4 | 189419 | 2005-06 | 12998.1 | 6.2 | 25184 | 12.1 | 208602 |
| 1994-95 | 11009 | 5.6 | 21878 | 11.1 | 196457 | 2006-07 | 14763 | 6.8 | 25313 | 11.6 | 217282 |
| 1995-96 | 10152.7 | 5.5 | 19864 | 10.7 | 185045 | 2007-08 | 15307.8 | 6.6 | 26815 | 11.6 | 230775 |
| 1996-97 | 11448 | 5.8 | 21553 | 10.9 | 198343 | 2008-09 | 15613.4 | 6.7 | 27330 | 11.7 | 234466 |
| 1997-98 | 11547.7 | 6.0 | 21143 | 11.0 | 192263 | 2009-10 | 15357 | 7.0 | 26950 | 12.4 | 218098 |



| | | | | | | | | | | | |
|---------|---------|-----|-------|------|--------|---------|---------|-----|-------|------|--------|
| 1998-99 | 12123.2 | 6.0 | 22907 | 11.3 | 203607 | 2010-11 | 16629.5 | 6.8 | 27866 | 11.4 | 244482 |
| 1999-00 | 13063.2 | 6.2 | 25201 | 12.0 | 209801 | 2011-12 | 17958.7 | 6.9 | 28389 | 10.9 | 259286 |
| 2000-01 | 13294.4 | 6.8 | 25325 | 12.9 | 196814 | 2012-13 | 16226.4 | 6.3 | 28543 | 11.1 | 257122 |
| 2001-02 | 13298.1 | 6.2 | 24887 | 11.7 | 212851 | 2013-14 | 16974.1 | 6.4 | 29480 | 11.1 | 265045 |
| 2002-03 | 12328.9 | 7.1 | 23491 | 13.4 | 174771 | 2014-15 | 15235.1 | 6.0 | 26698 | 10.6 | 252023 |

Source: Ministry of Agriculture and Farmers Welfare, Government of India

Table no. 5 shows the production of total food grains in India and percentage share of food grains to India by both the states. The share of Haryana was 5.2 percent in 1991-92 and increased in 2014-15 which is 6.0 percent. Punjab state contribute almost 11 to 12 percent share to India in production of total food grains. The share of Punjab is almost double to Haryana in production of food grains. And the entry of table no 6 shows the yield of food grains in kg/per hectare in India and states. The yield of food grains at Indian level was 1727 in 1991-92 and increasing in 2014-15 which is 2028 kg. per hectare. The trend of yield in Haryana and Punjab is also increasing which is 2536 in 1991-92 to 3427 kg. per hectare in 2014-15 and in Punjab 3477 to 4054 kg. per hectare in the same time period. The data elaborates that the yield of food grains is high in both the states in comparison to all India level and also the yield is high in Punjab in comparison to Haryana.

Table No. 6
STATE-WISE ESTIMATES OF YIELD - TOTAL FOODGRAINS
(Kg. Per Hectare)

| Year | Haryana | Punjab | ALL INDIA | Year | Haryana | Punjab | ALL INDIA |
|---------|---------|--------|-----------|---------|---------|--------|-----------|
| 1991-92 | 2536 | 3477 | 1382 | 2003-04 | 3068 | 3929 | 1727 |
| 1992-93 | 2584 | 3615 | 1457 | 2004-05 | 3092 | 4040 | 1652 |
| 1993-94 | 2633 | 3681 | 1501 | 2005-06 | 3045 | 3986 | 1715 |
| 1994-95 | 2730 | 3684 | 1546 | 2006-07 | 3393 | 4017 | 1756 |
| 1995-96 | 2539 | 3471 | 1491 | 2007-08 | 3420 | 4255 | 1860 |
| 1996-97 | 2843 | 3786 | 1605 | 2008-09 | 3387 | 4231 | 1909 |
| 1997-98 | 2763 | 3596 | 1550 | 2009-10 | 3383 | 4144 | 1798 |
| 1998-99 | 2700 | 3741 | 1627 | 2010-11 | 3526 | 4280 | 1930 |
| 1999-00 | 3047 | 4028 | 1704 | 2011-12 | 3879 | 4364 | 2078 |
| 2000-01 | 3060 | 4032 | 1626 | 2012-13 | 3689 | 4347 | 2129 |
| 2001-02 | 3128 | 4040 | 1734 | 2013-14 | 3855 | 4500 | 2120 |
| 2002-03 | 3103 | 3828 | 1535 | 2014-15 | 3427 | 4054 | 2028 |

Source: Ministry of Agriculture and Farmers Welfare, Government of India

Table no-7

PRODUCTION OF FOODGRAINS - RICE

(Thousand Tonnes)

| Year | Haryana | % Share of Haryana | Punjab | % Share of Punjab | ALL INDIA | Year | Haryana | % Share of Haryana | Punjab | % Share of Punjab | ALL INDIA |
|---------|---------|--------------------|--------|-------------------|-----------|---------|---------|--------------------|--------|-------------------|-----------|
| 1991-92 | 1812 | 2.43 | 6755 | 9.05 | 74678 | 2004-05 | 3023 | 3.64 | 10437 | 12.55 | 83131.7 |
| 1992-93 | 1869 | 2.56 | 7002 | 9.61 | 72868 | 2005-06 | 3210 | 3.50 | 10193 | 11.10 | 91793.4 |
| 1993-94 | 2057 | 2.56 | 7642 | 9.52 | 80298 | 2006-07 | 3371 | 3.61 | 10138 | 10.86 | 93355.3 |
| 1994-95 | 2227 | 2.72 | 7703 | 9.42 | 81814 | 2007-08 | 3613 | 3.74 | 10489 | 10.85 | 96692.9 |
| 1995-96 | 1847 | 2.40 | 6768 | 8.79 | 76975 | 2008-09 | 3298 | 3.33 | 11000 | 11.09 | 99182.5 |
| 1998-99 | 2425 | 2.82 | 7940 | 9.22 | 86077 | 2009-10 | 3625 | 4.07 | 11236 | 12.61 | 89092.9 |
| 1999-00 | 2583 | 2.88 | 8716 | 9.72 | 89683 | 2010-11 | 3472 | 3.62 | 10837 | 11.29 | 95979.8 |
| 2000-01 | 2695 | 3.17 | 9154 | 10.77 | 84977 | 2011-12 | 3759 | 3.57 | 10542 | 10.01 | 105311 |
| 2001-02 | 2726 | 2.92 | 8816 | 9.45 | 93340 | 2012-13 | 3976 | 3.78 | 11374 | 10.81 | 105232 |
| 2002-03 | 2468 | 3.44 | 8880 | 12.36 | 71820 | 2013-14 | 3998 | 3.75 | 11267 | 10.56 | 106646 |
| 2003-04 | 2790 | 3.15 | 9656 | 10.91 | 88526 | 2014-15 | 4006 | 3.80 | 11107 | 10.53 | 105482 |

Source: Ministry of Agriculture and Farmers Welfare, Government of India

The above data shows the production of rice in both states and in India as absolute figure in thousand tonnes. The table shows the percentage share of Haryana and Punjab to India. The rice share of Haryana was 2.43 percent in 1991-92 and 3.80 percent in 2014-15 and the share of Punjab is 9.05 to 10.53 in the same time period. The data shows that the percentage share of Punjab is high in comparison to Haryana. The reason of high share of Punjab may be the larger area, more crop intensity, and more fertile land and more irrigation facility in comparison to Haryana. And almost it is the same position in wheat production and yield of wheat in both the states which shows in table no. 9 and 10. The percentage share of Punjab is almost double to Haryana. The below table no 8 shows the yield of rice in terms of kg. per hectare at all India level and state level. The yield of rice is high in both the state in comparison to Indian level.

Table no-8

STATE-WISE ESTIMATES OF YIELD - RICE

(Kg. Per Hectare)

| Year | Haryana | Punjab | ALL INDIA | Year | Haryana | Punjab | ALL INDIA |
|---------|---------|--------|-----------|---------|---------|--------|-----------|
| 1991-92 | 2831 | 3257 | 1751 | 2003-04 | 2749 | 3694 | 2078 |
| 1992-93 | 2659 | 3391 | 1744 | 2004-05 | 2941 | 3943 | 1984 |
| 1993-94 | 2732 | 3507 | 1888 | 2005-06 | 3051 | 3858 | 2102 |
| 1994-95 | 2801 | 3383 | 1911 | 2006-07 | 3238 | 3868 | 2131 |
| 1995-96 | 2225 | 3132 | 1797 | 2007-08 | 3361 | 4019 | 2202 |
| 1996-97 | 2964 | 10542 | 1859 | 2008-09 | 2726 | 4022 | 2178 |
| 1997-98 | 2800 | 10542 | 1900 | 2009-10 | 3008 | 4010 | 2125 |
| 1998-99 | 2239 | 3152 | 1921 | 2010-11 | 2789 | 3828 | 2239 |
| 1999-00 | 2385 | 3347 | 1986 | 2011-12 | 3044 | 3741 | 2393 |
| 2000-01 | 2557 | 3506 | 1901 | 2012-13 | 3272 | 3998 | 2461 |
| 2001-02 | 2652 | 3545 | 2079 | 2013-14 | 3256 | 3952 | 2416 |
| 2002-03 | 2724 | 3510 | 1744 | 2014-15 | 3113 | 3838 | 2391 |

Source: Ministry of Agriculture and Farmers Welfare, Government of India

Table no-9

PRODUCTION OF FOODGRAINS – WHEAT

(Thousand Tonnes)

| Year | Haryana | % Share of Haryana | Punjab | % Share of Punjab | ALL INDIA | Year | Haryana | % Share of Haryana | Punjab | % Share of Punjab | ALL INDIA |
|---------|---------|--------------------|--------|-------------------|-----------|---------|---------|--------------------|--------|-------------------|-----------|
| 1991-92 | 6502 | 11.7 | 12295 | 22.1 | 55689.5 | 2004-05 | 9058 | 13.2 | 14698 | 21.4 | 68636.9 |
| 1992-93 | 7083 | 12.4 | 12369 | 21.6 | 57210.1 | 2005-06 | 8857 | 12.8 | 14493 | 20.9 | 69354.5 |
| 1993-94 | 7231 | 12.1 | 13377 | 22.4 | 59840.3 | 2006-07 | 10055 | 13.3 | 14596 | 19.3 | 75806.7 |
| 1994-95 | 7303 | 11.1 | 13542 | 20.6 | 65767.4 | 2007-08 | 10236 | 13.0 | 15720 | 20.0 | 78570.2 |
| 1995-96 | 7291 | 11.7 | 12518 | 20.2 | 62097.4 | 2008-09 | 10808.2 | 13.4 | 15733 | 19.5 | 80679.4 |
| 1998-99 | 8568 | 12.0 | 14460 | 20.3 | 71287.5 | 2009-10 | 10500 | 13.0 | 15169 | 18.8 | 80803.6 |
| 1999-00 | 9650 | 12.6 | 15910 | 20.8 | 76368.9 | 2010-11 | 11630 | 13.4 | 16472 | 19.0 | 86874 |
| 2000-01 | 9669 | 13.9 | 15551 | 22.3 | 69680.8 | 2011-12 | 12685.7 | 13.4 | 17280 | 18.2 | 94882.1 |
| 2001-02 | 9437 | 13.0 | 15499 | 21.3 | 72766.3 | 2012-13 | 11117 | 11.9 | 16591 | 17.7 | 93506.5 |
| 2002-03 | 9188 | 14.0 | 14175 | 21.6 | 65760.8 | 2013-14 | 11800 | 12.3 | 17620 | 18.4 | 95849.8 |
| 2003-04 | 9114 | 12.6 | 14489 | 20.1 | 72156.2 | 2014-15 | 10354 | 12.0 | 15050 | 17.4 | 86526.6 |

Source: Ministry of Agriculture and Farmers Welfare, Government of India

Table no-10

STATE-WISE ESTIMATES OF YIELD - WHEAT

(Kg. Per Hectare)

| Year | Haryana | Punjab | ALL INDIA | Year | Haryana | Punjab | ALL INDIA |
|---------|---------|--------|-----------|---------|---------|--------|-----------|
| 1991-92 | 3596 | 3803 | 2394 | 2003-04 | 3937 | 4207 | 2713 |
| 1992-93 | 3621 | 3770 | 2327 | 2004-05 | 3901 | 4221 | 2602 |
| 1993-94 | 3619 | 4011 | 2380 | 2005-06 | 3844 | 4179 | 2619 |
| 1994-95 | 3677 | 4090 | 2559 | 2006-07 | 4232 | 4210 | 2708 |
| 1995-96 | 3697 | 3884 | 2483 | 2007-08 | 4158 | 4507 | 2802 |
| 1996-97 | 3880 | 4234 | 2679 | 2008-09 | 4390 | 4462 | 2907 |
| 1997-98 | 3660 | 3853 | 2485 | 2009-10 | 4213 | 4307 | 2839 |
| 1998-99 | 3916 | 4332 | 2590 | 2010-11 | 4624 | 4693 | 2989 |
| 1999-00 | 4165 | 4696 | 2778 | 2011-12 | 5030 | 4898 | 3177 |
| 2000-01 | 4106 | 4563 | 2708 | 2012-13 | 4452 | 4724 | 3117 |
| 2001-02 | 4103 | 4532 | 2762 | 2013-14 | 4722 | 5017 | 3145 |
| 2002-03 | 4053 | 4200 | 2610 | 2014-15 | 3981 | 4294 | 2750 |

Source: Ministry of Agriculture and Farmers Welfare, Government of India

Table no-11

STATE-WISE PRODUCTION OF FOODGRAINS - COARSE CEREALS

(Thousand Tonnes)

| Year | Haryana | % Share of Haryana | Punjab | % Share of Punjab | ALL INDIA | Year | Haryana | % Share of Haryana | Punjab | % Share of Punjab | ALL INDIA |
|---------|---------|--------------------|--------|-------------------|-----------|---------|---------|--------------------|--------|-------------------|-----------|
| 1991-92 | 509 | 2.0 | 505.2 | 1.9 | 25991.4 | 2004-05 | 882 | 2.6 | 504 | 1.5 | 33464.7 |
| 1992-93 | 969 | 2.6 | 561.1 | 1.5 | 36592.6 | 2005-06 | 813 | 2.4 | 472 | 1.4 | 34069.3 |
| 1993-94 | 497 | 1.6 | 477.3 | 1.5 | 30816.4 | 2006-07 | 1197 | 3.5 | 552 | 1.6 | 33922.6 |
| 1994-95 | 970 | 3.2 | 481.3 | 1.6 | 29876.1 | 2007-08 | 1357 | 3.3 | 583.1 | 1.4 | 40750.4 |
| 1995-96 | 587 | 2.0 | 436.2 | 1.5 | 28962.3 | 2008-09 | 1329.4 | 3.3 | 575.1 | 1.4 | 40037.9 |
| 1998-99 | 777 | 2.5 | 456.2 | 1.5 | 31335.4 | 2009-10 | 1132 | 3.4 | 527.1 | 1.6 | 33549.1 |
| 1999-00 | 754 | 2.5 | 530 | 1.7 | 30331.4 | 2010-11 | 1369 | 3.2 | 538 | 1.2 | 43397.1 |
| 2000-01 | 831 | 2.7 | 575.1 | 1.9 | 31081 | 2011-12 | 1387 | 3.3 | 552 | 1.3 | 42041.3 |
| 2001-02 | 987 | 3.0 | 535.9 | 1.6 | 33376.8 | 2012-13 | 1003 | 2.5 | 525 | 1.3 | 40044.2 |
| 2002-03 | 590 | 2.3 | 402.3 | 1.5 | 26065.4 | 2013-14 | 1051 | 2.4 | 553.8 | 1.3 | 43294.9 |
| 2003-04 | 1146 | 3.0 | 545 | 1.4 | 37602 | 2014-15 | 819 | 1.9 | 499.4 | 1.2 | 42861.9 |

Source: Ministry of Agriculture and Farmers Welfare, Government of India

Table no-12

STATE-WISE ESTIMATES OF YIELD - COARSE CEREALS

(Kg. Per Hectare)

| Year | Haryana | Punjab | ALL INDIA | Year | Haryana | Punjab | ALL INDIA |
|---------|---------|--------|-----------|---------|---------|--------|-----------|
| 1991-92 | 676 | 2130 | 778 | 2003-04 | 1486 | 2904 | 1221 |
| 1992-93 | 1154 | 2308 | 1063 | 2004-05 | 1249 | 2714 | 1153 |
| 1993-94 | 745 | 1938 | 939 | 2005-06 | 1124 | 2697 | 1172 |
| 1994-95 | 1240 | 2090 | 924 | 2006-07 | 1567 | 3033 | 1182 |
| 1995-96 | 765 | 1986 | 940 | 2007-08 | 1762 | 3311 | 1431 |
| 1996-97 | 1068 | 2250 | 1072 | 2008-09 | 1760 | 3284 | 1459 |
| 1997-98 | 1361 | 2208 | 979 | 2009-10 | 1592 | 3315 | 1212 |
| 1998-99 | 981 | 2411 | 1068 | 2010-11 | 1755 | 3635 | 1531 |
| 1999-00 | 1000 | 2677 | 1034 | 2011-12 | 2001 | 3915 | 1590 |
| 2000-01 | 1071 | 2846 | 1027 | 2012-13 | 1914 | 3621 | 1617 |
| 2001-02 | 1339 | 2685 | 1131 | 2013-14 | 2006 | 3878 | 1717 |
| 2002-03 | 877 | 2132 | 966 | 2014-15 | 1728 | 3645 | 1703 |

Source: Ministry of Agriculture and Farmers Welfare, Government of India

The table no. 11 and 12 shows the production and yield of coarse cereals respectively. The share of Haryana in cereals production is 2 to 3 percent while the share of Punjab is almost 1.5 percent which is less than Haryana in terms of yield the situation is fluctuating in both the states. And it is almost the same position in production and yield of pulses which shows in table no. 13 and 14.

Table no-13
STATE-WISE PRODUCTION OF FOODGRAINS - PULSES

(Thousand tonnes)

| Year | Haryana | % Share of Haryana | Punjab | % Share of Punjab | ALL INDIA | Year | Haryana | % Share of Haryana | Punjab | % Share of Punjab | ALL INDIA |
|---------|---------|--------------------|--------|-------------------|-----------|---------|---------|--------------------|--------|-------------------|-----------|
| 1991-92 | 286.4 | 1.6 | 128.9 | 0.7 | 17519 | 2003-04 | 143.1 | 1.0 | 39.4 | 0.3 | 14905 |
| 1992-93 | 346.2 | 1.9 | 121.6 | 0.7 | 18501 | 2004-05 | 146 | 1.1 | 31.7 | 0.2 | 13130 |
| 1993-94 | 483 | 2.6 | 135.6 | 0.7 | 18464 | 2005-06 | 118.1 | 0.9 | 26.2 | 0.2 | 13384 |
| 1994-95 | 509 | 2.7 | 151.5 | 0.8 | 18999 | 2006-07 | 140 | 1.0 | 27.1 | 0.2 | 14198 |
| 1995-96 | 427.7 | 2.5 | 142 | 0.8 | 17010 | 2007-08 | 101.8 | 0.7 | 23 | 0.2 | 14762 |
| 1996-97 | 345 | 2.4 | 80.1 | 0.6 | 14148 | 2008-09 | 177.8 | 1.2 | 21.7 | 0.1 | 14566 |
| 1997-98 | 374.7 | 2.9 | 60 | 0.5 | 12971 | 2009-10 | 100 | 0.7 | 18 | 0.1 | 14662 |
| 1998-99 | 353.2 | 2.4 | 50.7 | 0.3 | 14907 | 2010-11 | 158.5 | 0.9 | 19.3 | 0.1 | 18241 |
| 1999-00 | 76.2 | 0.6 | 45.4 | 0.3 | 13418 | 2011-12 | 127 | 0.7 | 15 | 0.1 | 17089 |
| 2000-01 | 99.4 | 0.9 | 44.4 | 0.4 | 11075 | 2012-13 | 130.4 | 0.7 | 53 | 0.3 | 18343 |
| 2001-02 | 148.1 | 1.1 | 36 | 0.3 | 13368 | 2013-14 | 125.1 | 0.6 | 39.6 | 0.2 | 19255 |
| 2002-03 | 82.9 | 0.7 | 33.9 | 0.3 | 11125 | 2014-15 | 56.1 | 0.3 | 41.6 | 0.2 | 17152 |

Source: Ministry of Agriculture and Farmers Welfare, Government of India

Table no-14

STATE-WISE ESTIMATES OF YIELD - PULSES

(Kg. Per Hectare)

| Year | Haryana | Punjab | ALL INDIA | Year | Haryana | Punjab | ALL INDIA |
|---------|---------|--------|-----------|---------|---------|--------|-----------|
| 1991-92 | 704 | 780 | 533 | 2003-04 | 719 | 823 | 635 |
| 1992-93 | 705 | 730 | 573 | 2004-05 | 793 | 801 | 577 |
| 1993-94 | 985 | 796 | 598 | 2005-06 | 622 | 804 | 598 |
| 1994-95 | 1064 | 878 | 610 | 2006-07 | 824 | 850 | 612 |
| 1995-96 | 974 | 815 | 552 | 2007-08 | 602 | 804 | 625 |
| 1996-97 | 827 | 821 | 630 | 2008-09 | 972 | 908 | 659 |
| 1997-98 | 888 | 683 | 567 | 2009-10 | 758 | 887 | 630 |
| 1998-99 | 827 | 654 | 634 | 2010-11 | 899 | 910 | 691 |
| 1999-00 | 571 | 688 | 635 | 2011-12 | 706 | 789 | 699 |
| 2000-01 | 622 | 740 | 544 | 2012-13 | 800 | 823 | 789 |
| 2001-02 | 794 | 670 | 607 | 2013-14 | 820 | 872 | 764 |
| 2002-03 | 655 | 783 | 543 | 2014-15 | 674 | 846 | 728 |

Source: Ministry of Agriculture and Farmers Welfare, Government of India

Table no-15

PER HECTARE CONSUMPTION OF FERTILISER (N+P+K)

(Kg. Per Hectare)

| Year | Haryana | Punjab | ALL INDIA (Average) | Year | Haryana | Punjab | ALL INDIA (Average) |
|---------|---------|--------|---------------------|---------|---------|--------|---------------------|
| 1991-92 | 112.8 | 168.4 | 70.3 | 2003-04 | 161.7 | 190.1 | 88.2 |
| 1992-93 | 102.8 | 159.9 | 65.5 | 2004-05 | 155.1 | 194.6 | 94.5 |
| 1993-94 | 120.6 | 159.6 | 67.1 | 2005-06 | 166.7 | 210.1 | 104.5 |
| 1994-95 | 121.7 | 170.2 | 73.1 | 2006-07 | 173 | 209.2 | 112.3 |
| 1995-96 | 124.5 | 165.7 | 74.4 | 2007-08 | 189 | 215.7 | 115.3 |
| 1996-97 | 130.9 | 158.4 | 76.8 | 2008-09 | 199.6 | 224.6 | 127.2 |
| 1997-98 | 139.9 | 169.6 | 86.8 | 2009-10 | 209.9 | 237 | 135.3 |
| 1998-99 | 138 | 175.4 | 88.6 | 2010-11 | 213.8 | 242.7 | 146.3 |
| 1999-00 | 146.8 | 180 | 94.7 | 2011-12 | 220.1 | 242.6 | 142.3 |
| 2000-01 | 147.2 | 161.8 | 86.7 | 2012-13 | 211.8 | 250.6 | 130.8 |
| 2001-02 | 163.2 | 170.8 | 91.5 | 2013-14 | 206.9 | 219.4 | 118.6 |
| 2002-03 | 150.6 | 172 | 86.1 | 2014-15 | 221.4 | 227.5 | 128.1 |

Source: Ministry of Agriculture and Farmers Welfare, Government of India



This entry shows the consumption of fertilizer (N+P+K) IN terms of kg. per hectare. The data elaborates that the trend of fertilizer consumption is increasing at all India level and also the state level under the study period.

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