

Tahsilwise Changing Cropping Pattern in Latur District: A Geographical Review**Dr. Pradip P. Laggad**Department of Geography,
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Dist. Jalna.**Abstract**

In simple words cropping pattern means the proportion of area under various crops at a point of time. It is a dynamic concept because no cropping pattern can be said to be ideal for all times. It changes in space and time with a view to meet the requirements and is governed by the physical as well as cultural and technological factors. The change in cropping pattern a particular span of time clearly indicates the changes that have taken place in the agricultural development. These changes are brought about by the socio-economic influences. "In most of the situations the physical environment reduces the choice of the enterprise, either by prohibiting the growth of certain crops all together or by reducing their level."¹

Key Words : Cropping Pattern, Physical Environment and Socio-Economic Conditions

Introduction:

Cropping of agricultural enterprise patterns are the extent on which the arable land under different agricultural activities can be put to use.² These largely depend upon the Socio-economic influents which determine the possibility of enterprise the farmer chooses and the input intensity with which he farms, with an assured supply of water and of seeds and chemical fertilizers it become possible for the farmers to replace less profitable land by growing two or even three crops in the same field in a year.³ Differences in attitude towards natural land, in the level of prosperity and in technology have produced changes in emphasis, which are only gradually coming to be appreciated although in the long run their effects in both landscape and landuse studies are likely to be for reaching.⁴

Study Region:

Latur district is situated in the south-east part of the Maharashtra and it lies between 17° 52' north latitude to 18° 50' north latitudes and 76° 12' east longitudes to 77° 18' east longitudes. The total geographical area of Latur district is 7157 sq.kms. Out of the total geographical area of Maharashtra it covers 2.39 per cent.

The study of the influence of environment upon the nature and the distribution of crop and

livestock is of prime importance in agricultural geography. Nature with its physical characteristics provides a host of possibilities for agriculture in different areas.

Objectives:

Aims and objectives of this research paper given below:

1. To study the tahsilwise trends of area under various crops in the study region.
2. Analyze the volume of change in area under various crops through by Graph.

Source of Data and Methodology:

The data collected and used for the period 2001-02 to 2005-06, comes both from primary and secondary sources. The primary data is the raw data collected through different sources particularly questionnaires and personal interviews.

Secondary data obtained from Socio-Economic Review, District Census Handbooks, Gazetteers, Agricultural Epitomes, Periodicals, Season and Crop Report published by the different Agricultural Departments.

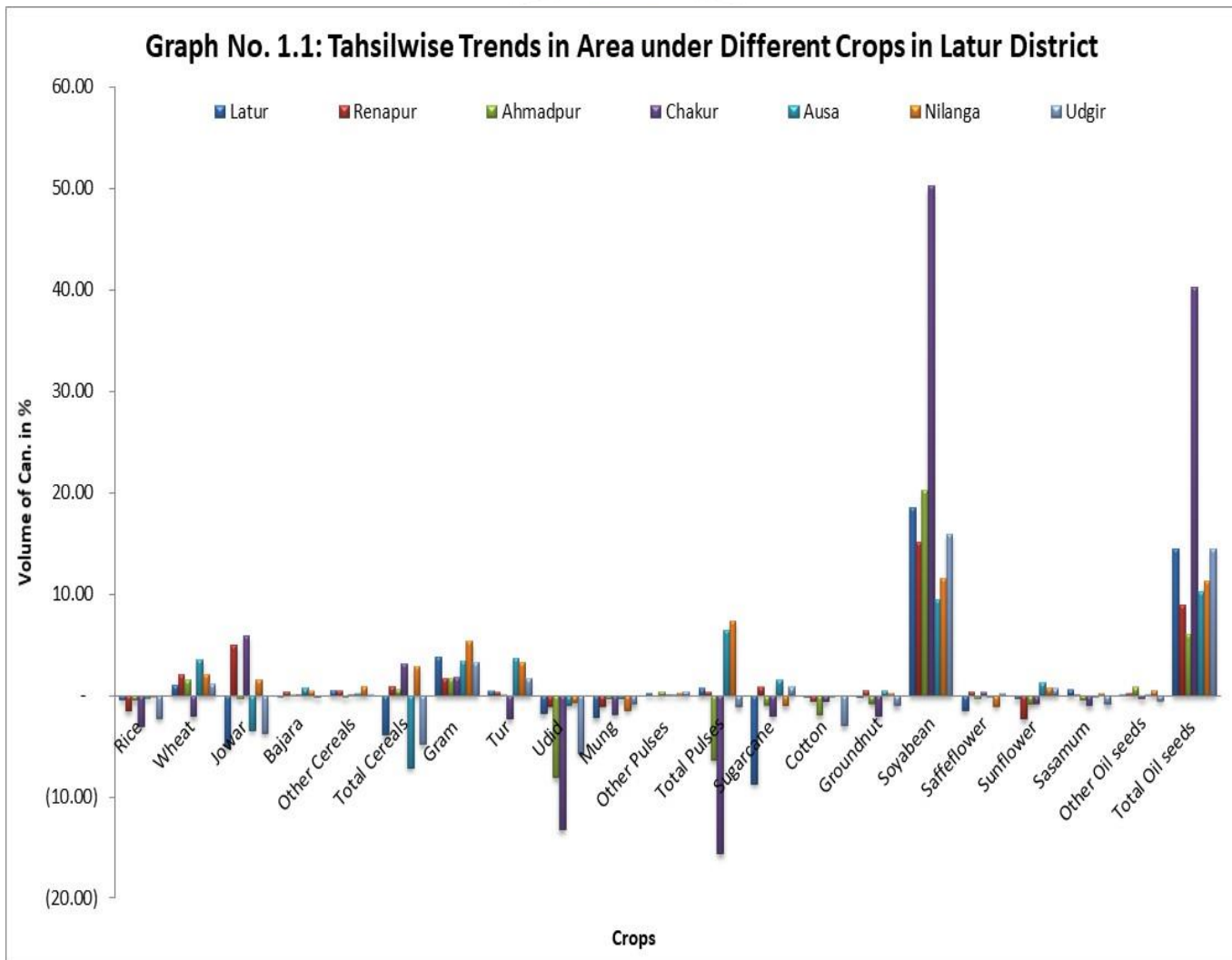
Tahsilwise Trends in Area under Different Crops in Latur District

Table No. 1.1 and Graph No. 1.1 shows the existing over all cropping pattern of the region and changes therein during 2001-02 to 2005-06. The region is no doubt a foodgrain oriented region. It occupied 344950 (51.77%) hectares of the total grossed area in 2005-06. Soya bean is the leading crop

of the region. Jowar, tur and sunflower follow it. Among foodgrains, whereas oilseeds occupies second position in area is it occupied 32.12% area out of the total gross cropped area in the study region in the year 2005-06.

Substantial changes have occurred in cropping pattern of the region during period under study. Spatial variation in the cropping pattern as depending upon the physical, socio-economic and

technological environments are different. Therefore, the distribution of various agricultural crops analysed in detail and changes therein for the period under investigation. The changes are found due to the combine effects of physical and non physical determinants



**Table No.1.1: Tahsilwise Trends in Area under Various Crops
in Latur District**

crop	Year and volume of change in %	Tahsils							Total Latur District
		Latur	Renapur	Ahmadpur	Chakur	Ausa	Nilanga	Udgir	
Rice	2001-02	1,500.00	1,400.00	2,800.00	2,400.00	2,300.00	2,100.00	4,200.00	16,700.00
		(2.00)	(2.32)	(3.67)	(3.80)	(2.13)	(1.78)	(3.60)	(2.70)
	2005-06	1,500.00	500.00	2,700.00	200.00	1,900.00	2,200.00	1,700.00	10,700.00
		(1.61)	(0.78)	(3.20)	(0.30)	(1.83)	(1.63)	(1.34)	(1.58)
Vol.of	ch. in %	(0.39)	(1.54)	(0.47)	(3.05)	(0.30)	(0.15)	(2.26)	(1.12)
Wheat	2001-02	4,600.00	1,800.00	1,000.00	3,200.00	4,200.00	6,200.00	2,100.00	21,500.00
		(6.14)	(2.98)	(1.31)	(5.08)	(3.88)	(5.26)	(1.80)	(3.48)
	2005-06	6,700.00	3,500.00	2,400.00	2,000.00	7,700.00	9,900.00	3,800.00	36,200.00
		(7.20)	(5.48)	(2.85)	(3.00)	(7.42)	(7.32)	(2.99)	(5.34)
Vol.of	ch. in %	1.06	2.05	1.54	(2.08)	3.54	2.06	1.19	1.86
Jowar	2001-02	14,000.00	7,500.00	13,100.00	11,300.00	13,600.00	15,200.00	18,800.00	93,500.00
		(18.69)	(10.01)	(17.19)	(17.94)	(12.56)	(12.90)	(16.12)	(15.15)
	2005-06	12,800.00	9,600.00	14,200.00	15,900.00	9,500.00	17,000.00	14,450.00	93,450.00
		(13.57)	(15.02)	(16.84)	(12.87)	(9.15)	(14.43)	(12.39)	(13.86)
Vol.of	ch. in %	(5.12)	5.01	(0.35)	5.93	(3.41)	1.53	(3.73)	(1.29)
Bajara	2001-02	800.00	800.00	800.00	1,000.00	1,300.00	900.00	1,100.00	6,700.00
		(1.07)	(1.32)	(1.05)	(1.59)	(1.20)	(0.76)	(0.94)	(1.09)
	2005-06	900.00	1,100.00	1,000.00	1,100.00	2,000.00	1,600.00	900.00	8,600.00
		(0.97)	(1.72)	(1.19)	(1.65)	(1.93)	(1.18)	(0.71)	(1.28)
Vol.of	ch. in %	(0.10)	0.40	0.14	0.06	0.73	0.42	(0.23)	0.19
Other Cereals	2001-02	500.00	200.00	500.00	300.00	700.00	400.00	600.00	3,200.00
		(0.66)	(0.33)	(0.66)	(0.48)	(0.65)	(0.34)	(0.51)	(0.52)
	2005-06	1,100.00	500.00	400.00	400.00	900.00	1,700.00	800.00	5,800.00

		(1.18)	(0.78)	(0.47)	(0.60)	(0.87)	(1.26)	(0.63)	(0.86)
Vol.of	ch. in %	0.52	0.45	(0.19)	0.12	0.22	0.92	0.12	0.34
Total Cereals	2001-02	21,400.00	13,800.00	18,200.00	16,600.00	25,600.00	24,800.00	25,700.00	141,600.00
		(28.57)	(22.85)	(23.88)	(26.35)	(23.66)	(21.05)	(21.82)	(23.68)
	2005-06	23,000.00	15,200.00	20,700.00	19,600.00	22,400.00	32,400.00	21,650.00	154,550.00
		(24.70)	(23.78)	(24.55)	(29.43)	(16.56)	(23.96)	(17.00)	(22.93)
Vol.of	ch. in %	(3.87)	0.93	0.67	3.08	(7.10)	2.91	(4.82)	(0.75)
Gram	2001-02	2,200.00	1,800.00	1,600.00	1,600.00	3,700.00	10,700.00	5,800.00	27,400.00
		(2.94)	(2.98)	(2.09)	(2.54)	(3.42)	(9.08)	(4.97)	(4.44)
	2005-06	6,300.00	3,000.00	3,200.00	2,900.00	7,000.00	19,500.00	10,500.00	52,400.00
		(6.77)	(4.69)	(3.79)	(4.35)	(6.74)	(14.42)	(8.25)	(7.77)
Vol.of	ch. in %	3.83	1.71	1.70	1.81	3.32	5.34	3.28	3.33
Tur	2001-02	5,400.00	3,000.00	7,900.00	6,200.00	12,500.00	7,100.00	14,300.00	56,400.00
		(7.29)	(4.96)	(10.36)	(9.84)	(11.55)	(6.03)	(12.26)	(9.14)
	2005-06	7,200.00	3,400.00	8,800.00	5,000.00	16,500.00	12,500.00	17,800.00	71,200.00
		(7.73)	(5.32)	(10.43)	(7.50)	(15.24)	(9.24)	(13.78)	(10.56)
Vol.of	ch. in %	0.44	0.36	0.07	(2.34)	3.69	3.21	1.72	1.42
Udid	2001-02	7,300.00	3,200.00	8,900.00	9,000.00	10,300.00	9,300.00	18,400.00	66,400.00
		(9.85)	(5.29)	(11.68)	(14.28)	(9.52)	(7.89)	(15.78)	(10.76)
	2005-06	7,500.00	2,700.00	3,000.00	700.00	8,900.00	9,700.00	12,900.00	45,400.00
		(8.05)	(4.23)	(3.56)	(1.05)	(8.57)	(7.17)	(10.13)	(6.73)
Vol.of	ch. in %	(1.80)	(1.06)	(8.11)	(13.23)	(0.95)	(0.72)	(5.65)	(4.03)
Mung	2001-02	3,000.00	1,800.00	2,000.00	1,700.00	3,000.00	4,100.00	5,500.00	21,100.00
		(4.00)	(2.98)	(2.62)	(2.69)	(2.77)	(3.48)	(4.72)	(3.42)
	2005-06	1,700.00	1,200.00	1,900.00	500.00	2,500.00	3,700.00	4,900.00	16,400.00
		(1.83)	(1.88)	(2.25)	(0.75)	(2.40)	(2.74)	(3.85)	(2.43)
Vol.of	ch. in %	(2.17)	(1.10)	(0.37)	(1.84)	(0.37)	(1.49)	(0.87)	(1.11)
Other Pulses	2001-02	700.00	N.A	500.00	100.00	1,200.00	300.00	100.00	2,900.00
			()						

		(0.93)		(0.66)	(0.16)	(1.10)	(0.25)	(0.06)	(0.47)
	2005-06	1,100.00	300.00	900.00	200.00	1,200.00	700.00	600.00	5,000.00
		(1.18)	(0.47)	(1.07)	(0.30)	(1.16)	(0.52)	(0.47)	(0.74)
Vol.of	ch. in %	0.25	--	0.41	0.14	0.06	0.27	0.41	0.27
Total Pulses	2001-02	18,600.00	9,800.00	20,900.00	18,600.00	30,700.00	31,500.00	44,100.00	176,200.00
		(24.83)	(16.23)	(27.42)	(29.52)	(28.37)	(26.74)	(37.82)	(28.23)
	2005-06	23,800.00	1,800.00	17,800.00	9,300.00	36,100.00	46,100.00	46,700.00	190,400.00
		(25.59)	(16.59)	(21.11)	(13.96)	(34.78)	(34.09)	(36.68)	(26.84)
Vol.of	ch. in %	0.76	0.36	(6.31)	(15.65)	6.41	7.35	(1.14)	(1.39)
Sugarcane	2001-02	10,000.00	1,500.00	2,500.00	1,700.00	3,500.00	4,000.00	1,300.00	24,500.00
		(13.35)	(2.48)	(3.28)	(2.69)	(3.23)	(3.39)	(1.11)	(3.97)
	2005-06	4,300.00	2,000.00	2,000.00	4,000.00	4,900.00	3,200.00	2,500.00	19,300.00
		(4.62)	(3.31)	(1.98)	(0.60)	(4.72)	(2.37)	(1.96)	(2.87)
Vol.of	ch. in %	(8.73)	0.83	(0.91)	(2.09)	1.49	(1.02)	0.85	(1.11)
Cotton	2001-02	200.00	900.00	5,100.00	500.00	200.00	100.00	4,300.00	11,300.00
		(0.26)	(1.49)	(6.69)	(0.79)	(0.20)	(0.08)	(3.69)	(1.83)
	2005-06	100.00	600.00	4,000.00	100.00	200.00	N.A	900.00	5,900.00
		(0.10)	(0.93)	(4.74)	(0.15)	(0.19)		(0.71)	(0.87)
Vol.of	ch. in %	(0.16)	(0.56)	(1.95)	(0.64)	(0.01)	--	(2.98)	1.03
Groundnut	2001-02	900.00	1,000.00	1,600.00	1,400.00	2,500.00	2,400.00	1,500.00	11,300.00
		(1.20)	(1.66)	(2.09)	(2.22)	(2.31)	(2.03)	(1.29)	(1.83)
	2005-06	900.00	1,400.00	1,100.00	100.00	2,900.00	3,100.00	400.00	9,900.00
		(0.96)	(2.19)	(1.30)	(0.15)	(2.79)	(2.29)	(0.31)	(1.47)
Vol.of	ch. in %	(0.24)	0.53	(0.79)	(2.07)	0.48	0.26	(0.98)	(0.36)
Soya bean	2001-02	1,000.00	2,200.00	900.00	2,500.00	700.00	2,200.00	1,200.00	10,700.00
		(1.34)	(3.64)	(1.18)	(3.97)	(0.65)	(1.87)	(1.03)	(1.73)
	2005-06	18,500.00	12,000.00	18,000.00	36,100.00	10,500.00	18,200.00	21,600.00	134,900.00
		(19.89)	(18.78)	(21.35)	(54.20)	(10.12)	(13.46)	(16.97)	(20.01)
Vol.of	ch. in %	18.55	15.14	20.17	50.23	9.47	11.59	15.94	18.28
Safflower	2001-02	1,900.00	900.00	600.00	900.00	3,700.00	7,200.00	4,700.00	19,900.00

		(2.54)	(1.49)	(0.79)	(1.43)	(3.42)	(6.11)	(4.03)	(3.22)
	2005-06	1,000.00	1,200.00	400.00	1,200.00	3,400.00	6,800.00	5,400.00	19,400.00
		(1.08)	(1.88)	(0.47)	(1.80)	(3.28)	(5.03)	(4.24)	(2.88)
Vol.of	ch. in %	(1.46)	0.39	(0.32)	0.37	(0.14)	(1.08)	0.21	(0.44)
Sun-flower	2001-02	2,500.00	4,200.00	4,200.00	3,900.00	4,400.00	5,400.00	4,700.00	34,100.00
		(3.34)	(6.95)	(5.51)	(6.19)	(4.07)	(4.58)	(4.03)	(5.53)
	2005-06	2,800.00	4,300.00	3,900.00	3,600.00	5,500.00	7,200.00	6,000.00	33,300.00
		(3.00)	(4.62)	(4.63)	(5.40)	(5.30)	(5.33)	(4.71)	(4.94)
Vol.of	ch. in %	(0.34)	(2.33)	(0.88)	(0.79)	1.23	0.75	0.68	(0.59)
Sasamum	2001-02	700.00	1,300.00	1,900.00	1,000.00	900.00	800.00	2,500.00	9,100.00
		(0.93)	(2.15)	(2.49)	(1.59)	(0.83)	(0.68)	(2.14)	(1.47)
	2005-06	1,400.00	1,400.00	1,700.00	400.00	800.00	1,200.00	1,600.00	8,500.00
		(1.50)	(2.19)	(2.02)	(0.60)	(0.77)	(0.89)	(1.25)	(1.26)
Vol.of	ch. in %	0.57	0.04	(0.47)	(0.99)	(0.06)	0.21	(0.89)	0.10
Other oil seeds	2001-02	1,200.00	700.00	2,900.00	600.00	2,400.00	1,200.00	1,800.00	10,800.00
		(1.60)	(1.16)	(3.80)	(0.95)	(2.22)	(1.02)	(1.54)	(1.75)
	2005-06	1,500.00	900.00	3,900.00	400.00	2,400.00	2,100.00	1,300.00	12,500.00
		(1.61)	(1.40)	(4.62)	(0.60)	(2.31)	(1.55)	(1.02)	(1.85)
Vol.of	ch. in %	0.01	0.24	0.82	(0.35)	0.09	0.53	(0.52)	0.10
Total Oilseeds	2001-02	8,200.00	14,700.00	19,800.00	14,200.00	15,500.00	20,400.00	16,400.00	95,900.00
		(13.58)	(24.33)	(25.98)	(22.53)	(14.33)	(17.31)	(14.07)	(17.69)
	2005-06	26,100.00	21,200.00	27,000.00	41,800.00	25,500.00	38,600.00	36,300.00	216,500.00
		(28.03)	(33.18)	(32.03)	(62.76)	(24.57)	(28.55)	(28.51)	(32.12)
Vol.of	ch. in %	14.45	8.85	6.05	40.23	10.24	11.24	14.44	14.43
Total Gross Cropped Area	2001-02	74,900.00	60,400.00	76,200.00	63,000.00	108,200.00	117,800.00	116,600.00	617,100.00
		(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)
	2005-06	93,000.00	63,900.00	84,300.00	66,600.00	103,800.00	135,200.00	127,300.00	674,100.00
		(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)

Source: Agricultural Department of Zial Prishad Latur.

Computed By Author
(Figures in the brackets indicate percentages.)

Total Cereals

Below 20% gross cropped area was noticed under total cereals in AUSA and Udgir tahsils whereas 20% to 25% area was found in Latur, Renapur, Ahmadpur and Nilanga tahsils while above 25% area was observed under total cereals in Chakur tahsil in year 2005-06.

Above 3% positive change in total cereals area was experienced in Chakur (3.08%) tahsil while below 3% positive change in total cereals area was observed in Renapur (0.93%), Ahmadpur (0.67%) and Nilanga (2.91%) tahsils. While below 5% negative change in total cereals was took place in Latur (3.87%) and Udgir (4.82%) tahsils whereas above 5% negative change was found AUSA (7.1%) tahsil in the study region.

Total Pulses

Out of the total gross cropped area below 18% area was recorded in Renapur and Chakur tahsils whereas 18% to 27% area was observed under total pulses in Latur and Ahmadpur tahsils while above 27% area was observed under total pulses in AUSA, Nilanga and Udgir tahsils in year 2005-06.

Below 3% positive change in total pulses area was experienced in Latur and Renapur tahsil whereas above 3% positive change in total pulses area was observed in AUSA and Nilanga tahsils while below 10% negative change in total pulses area was found in Ahmadpur and Udgir tahsils whereas above 10% negative change in total pulses area was observed in Chakur tahsil during the period under.

Total Oilseeds

Out of the total gross cropped area below 30% area was recorded under total oilseeds in Latur, AUSA, Nilanga and Udgir tahsils whereas 30% to 40% area was found under total oilseeds in Renapur and Ahmadpur tahsil while above 40% gross cropped area was found under total oilseeds in Chakur tahsil in year 2005-06.

Only positive changes were observed in area under total oil seed during study period. Below 10% positive change in total oilseeds area was experienced in Ahmadpur and Renapur tahsils whereas above 10% to 20% positive change was found in Latur, AUSA, Nilanga and Udgir tahsils while above 20% positive change in area under total

oilseeds was experienced in only Chakur tahsil during the investigation period.

Conclusions

1. Out of the total gross cropped area below 1% area was under rice in Renapur and Chakur tahsils while 1% to 2 % area was found under rice in Latur, AUSA, Nilanga and Udgir tahsils. Above 2% area was observed under rice in Ahmadpur tahsil in year 2005-06.
2. Wheat occupies 36200 hectare (5.34%) land out of the total cropped area of the study region. The area under wheat varies from tahsil to tahsil in the study region.
3. Out of the total cropped area about 13.86% area was under jowar in year in the study region in 2005-06.
4. Out of total gross cropped area below 0.50 % area was found under other cereals in Ahmadpur tahsil while 0.50% to 1 % gross cropped area was observed under other cereals in Renapur, Chakur , AUSA and Udgir tahsils whereas above 1% area was found under in Latur and Nilanga tahsils.
5. Gram is most dominant crop in the study region which grows only in rabi season. The area under gram is increased from 27,400 hectare to 52,400 hectare in the study region during the study period.
6. Sugarcane is a principal crop lives in the land one year to one and half year. This crop requires more capital as compared to other crops.
7. Cotton is not an important cash crop in the study region. About 1.87% to 0.87% area was found under cotton in the study region during investigation period.
8. Area under groundnut decreased from 11300 hectares to 9900 hectares during the period of investigation.
9. The area under soya bean is rapidly increased from 10,700 hectare to 1, 34,900 hectare during the period of investigation. It means that major change was observed in soya bean area between 2001-02 to 2005-06.
10. Area under sunflower is decreased from 34100 hectare to 33300 hectare during the period of investigation.

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