

SEASON AND CROP REPORT

2007 - 08

INTRODUCTION

The Union Territory of Puducherry consists of four regions viz. Puducherry, Karaikal, Mahe and Yanam, which are not geographically contiguous. Puducherry region is located in the East Coast bounded by Cuddalore and Villupuram Districts of Tamil Nadu State, while Karaikal region, which is also situated in East Coast, bounded by Nagapattinam and Thiruvallur Districts of Tamil Nadu State. Mahe region is located in the West Coast near Cannanore District of Kerala State and Yanam region is located in the East Godavari District of Andhra Pradesh State.

The Directorate of Economics and Statistics, Government of Puducherry is declared as the State Agricultural Statistics Authority and the scheme viz “ Collection of Agricultural Statistics” is being implemented in Puducherry Region since 1961-62 and in phases this scheme was extended to the other three regions of the Union Territory of Puducherry. The Field Supervisors of this Directorate, are responsible for the collection of field level statistics in the three seasons of an agricultural year . These primary workers visit each and every plot and collect “ Land Utilisation Statistics“ with the help of village maps supplied by the Revenue Department, Puducherry. The supervisory staff of the Directorate provide able guidance to the primary enumerators in carrying out their work successfully and scientifically.

POPULATION

According to 2001 Population census, the total population of the Union Territory of Puducherry is 9,74,345 persons. Of this 4,86,961 are males and 4,87,384 are females, with a sex ratio of 1001 females to 1000 males. The regional break up figures with density of population is given below.

Region	Population 2001 Census			Density per Sq.Km
	Males	Females	Total	
Puducherry	3,69,428	3,65,904	7,35,332	2,536
Karaikal	84,487	86,304	1,70,791	1,061
Mahe	17,153	19,675	36,828	4,092
Yanam	15,893	15,501	31,394	1,570
U.T. of Puducherry	4,86,961	4,87,384	9,74,345	2,030

The rural population is 3,25,726 persons (33.43%) whereas the urban population is 6,48,619 persons which constitutes 66.57% of the total population.

The following table reveals the available working force in U.T. of Puducherry as per 2001 Census.

Region	Total workers	Agricultural Workers (Cultivators and Agricultural labourers)	Percentage of Agricultural workers to total workers.	Net area sown (in Hectares) 2007-08	Per-capita Net Area Sown (in Hectare)	Density of Agricultural workers per 100 Hectare of net area sown

					<i>Total Population</i>	<i>Agricultural workers</i>	
Puducherry	2,65,660	44,569	16.78	12265	0.017	0.275	363
Karaikal	57,497	12,937	22.50	6388	0.037	0.494	203
Mahe	9,292	173	1.86	607	0.016	3.509	29
Yanam	9,903	1,867	18.85	609	0.019	0.326	307
U.T. of Puducherry	3,42,352	59,546	17.39	19869	0.020	0.334	300

The total Population of the Union Territory of Puducherry is 9,74,345 and out of this 3,42,352 (35.14%) are classified as workers. Agriculture is the main economic activity of the U.T.of Puducherry and this sector had employed 59,546 persons who are either Cultivators or Agricultural workers. The above table gives the clear picture of workforce of the Territory on Agricultural Sector.

RAINFALL AND SEASONAL CONDITION

The Union Territory of Puducherry receives rainfall both from “South – West monsoon” and “North–East monsoon.”

The monsoon period (June to May) is divided into four seasons

- i) South–West monsoon
- ii) North–East monsoon
- iii) Winter period
- iv) Hot weather period.

SOUTH–WEST MONSOON (JUNE 2007 TO SEPTEMBER 2007)

This season’s rainfall is vital as regards to the production of Khariff Crops. Mahe region, which is located in the West coast of Kerala State receives its major rainfall during this season. The region –wise rainfall during the above season is given below.

<i>Name of the Region</i>	<i>Number of Rainy days</i>	<i>Total rainfall (in m.m)</i>	<i>Normal rainfall (in m.m)</i>
Puducherry	24	250.5	378.5
Karaikal	18	258.7	258.7
Mahe	96	3476.6	2729.8
Yanam	38	764.0	691.3

It may be noted that Mahe and Yanam regions have recorded a high level of rainfall while compared to normal rainfall, while Karaikal region had received 100% normal rainfall and Puducherry region recorded a low level of 66.18% as compared to the normal rainfall.

NORTH–EAST MONSOON (OCTOBER 2007 TO DECEMBER 2007)

The region-wise rainfall during the season is shown in the following table:

<i>Name of the Region</i>	<i>Number of Rainy days</i>	<i>Total rain fall (in m.m)</i>	<i>Normal rainfall (in m.m)</i>
Puducherry	28	823.0	849.4
Karaikal	23	1016.1	993.2
Mahe	16	311.2	367.2
Yanam	8	238.6	450.3

Karaikal region has recorded a high level of rainfall when compared to Normal rainfall. The other regions have recorded low level of rainfall.

WINTER (JANUARY 2008 AND FEBRUARY 2008)

The region – wise rainfall during the winter season is presented in the following table:

<i>Name of the Region</i>	<i>Total Rainy days</i>	<i>Total rainfall (in m.m)</i>	<i>Normal rainfall (in m.m)</i>
Puducherry	2	74.0	46.0
Karaikal	3	38.0	66.5
Mahe	1	3.2	10.4
Yanam	3	92.2	27.1

Yanam and Puducherry regions have recorded high level of rainfall during the winter season while Karaikal and Mahe regions have recorded low level of rain fall compared to normal rain fall

HOT-WEATHER PERIOD (MARCH 2008 TO MAY 2008)

The above season's rainfall details are given in the following table.

<i>Name of the Region</i>	<i>Total Rainy days</i>	<i>Total rainfall (in m.m)</i>	<i>Normal rainfall (in m.m)</i>
Puducherry	11	269.0	64.3
Karaikal	10	255.3	68.4
Mahe	19	453.0	279.7
Yanam	5	148.4	70.1

During the above season Puducherry, Karaikal, Mahe and Yanam regions recorded high level rainfall which are fairly above the normal rainfall of the respective regions.

RAINFALL ABNORMALITIES

The rainfall abnormalities are classified as follows

- i) Excess (+) 20% and above normal
- ii) Normal (-) 19.9% to (+) 19.9%
- iii) Deficient (-) 20% to (-) 59.9%
- iv) Scanty (-) 60% to (-) 99.9%
- v) No rain (-) 100%

CLASSIFICATION OF AREA

The total geographical area of the Union Territory of Puducherry is 480.58 Sq. Km according to the Survey of India, whereas it is reported as 48,651 hectares according to village paper, which is classified into nine categories.

The following table gives the nine fold classification of land utilization and the area under each category with its respective percentage to the total geographical area.

Sl.No.	Category	2007– 08	
		Area in Hectare	Percentage to total Geographical area
1.	Forest		-
2.	Land put to non – agricultural use	18141	37.29
3.	Barren and un culturable land	72	0.15
4.	Permanent pastures and other grazing land	0	0.00
5.	Land under misc. tree crops and groves	1239	2.54
6.	Culturable waste	4276	8.79
7.	Other fallow land	2482	5.10
8.	Current fallow	2572	5.29
9.	Net area sown	19869	40.84

CONCEPTS AND DEFINITIONS

FOREST

All lands classified as “ Forest ” under any legal enactment dealing with forests or administered as forests whether State owned or private. There is no forest area in the Union Territory of Puducherry.

LAND PUT TO NON-AGRICULTURAL USE

All lands occupied by Buildings, Paths, Roads, Railways, Rivers, Ponds, Lakes, Canals and other lands put to non-agricultural purposes are brought under this category.

During the year 2007- 08, area under this category was 18141 hectares (37.29%) of the total geographical area, which was more than 354 hectares as compared to the previous year 2006 – 07.

BARREN AND UNCULTURABLE LANDS

Land where cultivation is not at all possible comes under this category. During the year 2007 – 08, 72 hectares (0.15%) were under this category.

PERMANENT PASTURES AND OTHER GRAZING LANDS

All grazing lands, whether they are permanent pastures or meadows are considered as permanent pastures and other grazing lands according to their nature. No area was recorded under this category during the year 2007-08

LAND UNDER MISCELLANEOUS TREE CROPS & GROVES (not included in net area sown)

Lands in which trees and groves are grown which are not included in the net area sown come under this category. An area of 1,239 hectares (2.54%) was recorded under this category.

CULTURABLE WASTE

All lands available for cultivation whether not taken up for cultivation or taken up for cultivation once, but not cultivated during the current year and continuously for the last five years or more, in succession for one reason or the other, are classified as culturable waste. During the year 2007-08, 4276 hectares have been recorded under this category, which constitutes 8.79% of the total geographical area.

OTHER FALLOW LANDS

All lands, which are usually taken up for cultivation but are temporarily suspended from cultivation for a period of not less than one year and not more than five years are considered as other fallow lands. During the year 2007-08, 2,482 hectares were recorded as area under this category which is 5.10% of the total geographical area.

CURRENT FALLOWS

Cultivable lands, which are kept fallow during the entire period under review, are known as current fallows. During 2007-08, this category was recorded as 2572 hectares which is 5.29% .

NET AREA SOWN

Net area sown represents the area sown with crops at least once in any of the crop season of the year, counting area sown more than once in the same year, only once. The net area sown in the current year 2007-08 was 19869 hectares as against 20485 hectares recorded last year(2006-07) representing a fall of 3.01%.

The table below represents the region-wise distribution of net area sown to their respective geographical area.

Sl. No.	Region	Percentage of net area sown to	
		Geographical area of the region	Total net area sown in the U.T
1.	Puducherry	41.75	61.73
2.	Karaikal	39.90	32.15
3.	Mahe	69.77	3.06
4.	Yanam	25.47	3.07

The following table shows the region-wise intensity of total cropped area to net area sown.

Sl. No.	Name of the region	Percentage of Net area sown to total cropped area
1.	Puducherry	54.73
2.	Karaikal	60.60
3.	Mahe	99.51
4.	Yanam	54.38

TOTAL CROPPED AREA (GROSS CROPPED AREA)

The Total Cropped area was recorded as 34682 hectares during the year 2007-08 as against 35943 hectares (2006-07) registering a decrease of 3.51% The area sown more than once was reported as 14813 hectares during 2007-08 as compared to 15458 hectares during the year 2006-07.

AREA IRRIGATED BY DIFFERENT SOURCES OF IRRIGATION

The Net Area Irrigated by different sources of irrigation during the year 2007-08 was recorded as 17111 hectares. In Puducherry region, 88.71% of the net area sown was irrigated, while in Karaikal region the respective figure is 92.74%. The relevant figures for Mahe and Yanam region was 4.94% and 45.48% respectively.

The following table shows the area irrigated by different sources of irrigation in respect of Union Territory of Puducherry.

Sl. No.	Sources of Irrigation	Net Area Irrigated (in Hect)	Percentage
1	Canal	6170	36.06
2	Tank	0	0
3	Tubewell	10896	63.68
4	Ordinary Well	0	0
5	Other Source	45	0.26
Total		17111	100

It may be noted that 6170 hectares in Karaikal & Yanam regions were irrigated through canals and in Puducherry region the main source of irrigation was “Tube Wells”.

During the year 2007-08, the Gross area irrigated under different crops was 26937 hectares as against 28183 hectares in 2006-07. Percentage of area irrigated to total cropped area was 77.67% in the Union Territory of Puducherry. It is worth mentioning here that 88.49 % of the total cropped area in Puducherry region alone was irrigated whereas the respective figures for Karaikal, Mahe and Yanam regions were 62.06 % , 5.41% and 47.32 % respectively.

The details of the percentage of gross area irrigated under different crops are shown below in respect of Union Territory of Puducherry as a whole.

Paddy	- 75.87%	Sugarcane	- 8.62%
Ragi	- 0.26%	Fruits and Vegetables	- 3.47%
Cumbu	- 0.22%	Condiments and Spices	- 0.03%
Cholam	- 0.01%	Groundnut	- 2.76%
Other Millets	- 0.01%	Other Non- food crops	- 7.47%
Pulses	- 1.28%		

The percentage of area irrigated under principal crops to total area sown under each crop is given in the following table

Name of the crop	Percentage of area irrigated to total area sown under the crops	
	2006-07	2007-08
Paddy	100.00	100.00
Ragi	100.00	100.00
Groundnut	96.56	97.25
Sugarcane	100.00	100.00
Cotton	100.00	100.00

AREA SOWN WITH CROPS (TOTAL CROPPED AREA)

The total cropped area under all crops was 34682 hectares in 2007-08 which is less by 1,261 hectares as compared to 2006-07 During the year 2007-08 the area under food crops accounted for 83.48 % and respective percentage of non-food crops is 16.52%.

The cropping pattern in the Union Territory of Puducherry as a whole during 2006-07 and 2007-08 is as below :-

Name of the crop	Percentage of area under principal crops to total cropped area	
	2006-07	2007-08
<u>Food-Crops</u>		
Paddy	60.22	58.93
Ragi	0.13	0.21
Cumbu	0.22	0.18
Other Millets	0.01	0.01
Pulses	13.51	12.91
Sugarcane	6.96	6.70
Other food-crops	4.44	4.54
Total Food Crops	85.49	83.48
<u>Non-Food Crops</u>		
Cotton	0.16	0.19
Groundnut	1.94	2.20
Gingelly	0.38	0.38
Coconut	6.08	6.24
Casuarina	3.37	4.10
Other Non-food Crops	2.58	3.41
Total Non-Food Crops	14.51	16.52

In Puducherry region, food crops were cultivated in 79.92% of the total cropped area whereas in Karaikal region it was 96.74%. In this aspect Mahe and Yanam regions recorded 21.15 % and 63.93 % respectively.

PADDY

Paddy is the principal crop amongst all crops and Paddy was cultivated in an area of 20437 hectares during the year 2007-08 which accounts for 58.93% of the total cropped area . The area under Paddy in 2006-07 was 21645 hectares. Production of Rice during 2007–08 was reported as 53324 tonnes as against 60171 tonnes in 2006-07. The average yield rate of Rice was 2609 Kgs. Per hectare during 2007-08.

Percentage of area under Paddy to the total cropped area in respect of each region of Union Territory of Puducherry can be studied from the following table.

Region	Percentage of area under Paddy to total cropped area
Puducherry	60.03
Karaikal	61.25
Mahe	0.00
Yanam	47.23

Paddy is normally cultivated in wetlands, which are irrigated by different sources of irrigation such as Canals, Tanks and Tube Wells. Usually paddy is cultivated during three different seasons in a year. Paddy first crop (Kuruvai) is normally sown during the months of May to July and harvested during September to October. Paddy second crop (Samba), which is predominant, is sown during the period from August to October and harvested during December to February. The sowing season of paddy third crop (Navarai) is from January to March and is harvested during May to June.

RAGI

Ragi was cultivated in Puducherry region to an extent of 70 hectares. This crop is mainly sown in dry lands and irrigated by tube wells.

The production was estimated at 167 tonnes. 0.21% of total cropped area was utilized for Ragi cultivation.

CUMBU

Cumbu was cultivated only in Puducherry region to an extent of 64 hectares in 2007-08 and the production being 133 tones. Cumbu is mainly sown in dry lands for two seasons viz. Khariff and Rabi-II.

OTHER MILLETS

Other Millets such as Thenai and Cholan were grown only in Puducherry region in an area of 2 hectares and 3 hectares which are too small to take note off.

PULSES

Pulses were cultivated in 4478 hectares in the entire Union Territory and of this Blackgram and Greengram occupied 2,259 hectares and 2,183 hectares respectively. The production of Blackgram was 301 tonnes and that of Greengram was 272 tonnes.

SUGAR CANE

Sugarcane is the major crop among the commercial crops and grown mainly in Puducherry region. During the year 2007–08 Sugarcane was cultivated in 2323 hectares of which 2306 hectares was recorded in Puducherry region alone. The production of Sugarcane during the year 2007–08 was estimated as 2,28,416 tonnes as against 3,83,706 tonnes during 2006–07.

COTTON

Cotton is the only fibre crop grown in Puducherry and Karaikal region only. During 2007-08 area under cotton was reported as 66 hectares of which 38 hectares was grown in Karaikal region alone. Production of Cotton was 38 tonnes.

GROUNDNUT

Groundnut is one among the leading Oilseeds cultivated in the Union Territory of Puducherry. During the year 2007-08, the area under Groundnut area was reported as 764 hectares which is 2.20 % of the total cropped area and the production was estimated at 1,505 tonnes as compared to 1,427 tonnes in 2006-07. Groundnut is sown as an irrigated crop during December to February and as a dry crop in July and August of a year.

COCONUT

Coconut is another important oil seed crop, cultivated in 2,164 hectares during 2007- 08 of which 1,179 hectares fall in Puducherry region and 481 hectares in Mahe region. It is significant to note that in Mahe, 78.85 % of the total cropped area are occupied by Coconut.

GINGELLY

Gingelly was sown in an area of 132 hectares in 2007- 08 as against 135 hectares during 2006 – 07 with an average yield of 1045 kgs. per hectare.

WHOLESALE PRICES OF PRINCIPAL AGRICULTURAL COMMODITIES

AT PUDUCHERRY MARKET

The wholesale prices of some important agricultural commodities are collected every week in Puducherry Market under “Market Intelligence Scheme”. The analytical note on the price trend in Puducherry Market is discussed below.

PADDY

The annual average wholesale price of Paddy (I-sort) for the year 2007-08 stood at Rs.856.59 per quintal and a mixed trend was witnessed during the last five years as may be seen from table -VI

RICE (BOILED – I SORT)

In the open market annual average wholesale price of Boiled Rice (I-sort) was reported as Rs.1740.00 per quintal during the year 2007-08 and a similar mixed trend as that of Paddy was noticed during the last five years.

RAGI AND CUMBU

The annual average wholesale price of Ragi for the year 2007-08 stood at Rs.786.78 per quintal as against Rs.669.61 in 2006-07 witnessing an increasing trend. The annual average wholesale price of Cumbu was reported as Rs.814.40 per quintal in 2007-08 as against Rs. 843.02 in 2006-07 registering a decreasing trend.

PULSES

The yearly average wholesale prices of Greengram, Blackgram and Redgram Dhall (I-sort) were registered as Rs. 3,700.00, Rs.2,536.76 and Rs.3,911.25 per quintal respectively during 2007-08 as against Rs.3,929.58, Rs.3,593.48 and Rs.3,326.21 per quintal during 2006-07.

CONDIMENTS AND SPICES

The annual average wholesale price of chillies was reported as Rs.4,970.21 per quintal and a mixed trend was witnessed during the last five years.

ONION (DINDUGUL)

The annual average wholesale price of Onions which was reported as Rs.1,457.29 per quintal during 2007-08 as against Rs.1,487.08 in 2006-07 registering a decreasing trend.

GROUNDNUT (KERNALS) AND GINGELLY SEEDS

The annual average wholesale price of Groundnut (Kernals), was reported as Rs.2,610.92 per quintal in 2006-07 increased to Rs.2910.49 in 2007-08. The annual average wholesale price of Gingelly seeds which was reported as Rs.2,627.74 in 2006-07 increased to Rs. 3,001.12 per quintal in 2007-08 witnessing an increasing trend.

COCONUT

The annual average wholesale price of Coconuts (per 1000 nuts) reported as Rs.4,604.17 in 2007-08.

WAGES PAID TO AGRICULTURAL LABOURERS

Statistics relating to daily wages paid to agricultural and skilled labourers are collected every month from four selected centres at Puducherry region, two selected centres at Karaikal region and one selected center at Yanam region of the Union Territory of Puducherry. The agricultural labourers are mainly classified into two groups viz.,

- i) Field Labourers and
- ii) Skilled labourers.

Field labourers comprise of Ploughmen, Sowers, Transplanters, Weeders, Reapers and Harvesters. Skilled labourers are Carpenters and Blacksmiths. Data regarding average daily wages paid to agricultural labourers during 2007-08 in Puducherry, Karaikal and Yanam regions are detailed in the tables VII-A, VII- B and VII-C. The summary table consists of the average daily wages in respect of Union Territory of Puducherry. The index numbers of agricultural wages are also given in a separate table taking the agricultural year 1999-2000 as base year.

The average daily wages paid to each category of labourers have been computed with simple arithmetic mean of the wage rates that prevailed in the seven selected centers on the last working day of every month during the year 2007- 08. The base year average of daily wages has been worked out with the simple average of all months of the year 1999-2000.

The monthly wage relative computed by expressing the average daily wages paid to each category of Labour during a month of the current year as percentage of the corresponding base year average wage rates.

The index numbers of wages paid are discussed in detail below:

FIELD LABOUR

PLOUGH MEN

The average index number of wages paid to Ploughmen which was reported as 169 for the year 2007-08 as against 170 in 2006-07.

SOWERS AND TRANSPLANTERS

The index number of wages paid to men which were reported to 168 for the year 2007-08, where as for women, the average figure was reported as 199.

WEEDERS

The index number of wages paid to weeders (women) varied from 208 and 234 during 2007- 08 the annual average being 217.

REAPERS AND HARVESTERS

The index number of wages paid to Reapers and Harvesters (men) ranged between 136 and 256 and that of woman between 162 and 227.

OTHER AGRICULTURAL LABOURERS

The index number of wages paid to this category (men) slightly increased from 166 in August 2007 to 179 in September 2007, thereafter significant increase in November 2007 at 219. The respective figure for women reported as 253.

SKILLED LABOURERS

The index number for Carpenters ranged between 150 and 175. The same for Blacksmith varied from 212 to 222.

REVIEW ON AGRICULTURAL INDICES

Agricultural Indices are computed with the base year of triennium ending 1999-2000 =100. Index numbers for area under all Crops, Net area sown, Yield, Agriculture production, Cropping intensity, Cropping pattern and productivity per hectare are constructed.

The index of area under all crops shows a mixed trend every year due to unstable cropping pattern followed by ryots and availability of water. In 2007-08 index is 78.85.

The index of net area sown also varied from 99.69 2000-2001 to 78.69 in 2007-08, showing a revised trend.

The index of yield and productivity per hectare crossed the 100 mark for the past nine years, which is a good sign of improvement.

The index of agricultural production decreased by 21.74 points from previous year and stood at 90.74 in 2007-08.

The index of cropping intensity shows a mixed trend and quated at 100.20 in the year 2007-08.

The index of cropping pattern increased from 101.54 in 2006-07 to 101.74 in 2007-08.

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