

# WEATHER REPORT FOR THE YEAR 1st JUNE, 1958, TO 31st MAY, 1959

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## General

This report deals primarily with the weather conditions experienced along the sugar belt for the period June 1, 1958 to May 31, 1959. However, meteorological data for the previous yearly period will also be reviewed, since sugarcane is still predominantly a two-year crop in this region.

The rainfall figures given in subsequent tables have been sent in by 54 recording stations scattered along the cane belt, but the other climatic data have been recorded at the Experiment Station, Mount Edgcombe. Since the Experiment Station is roughly in the centre of the cane growing area, these figures will largely reflect the scene throughout the industry.

## Rainfall Returns from Fifty-four Centres

Rainfall returns are collected from centres which have been selected to give as widespread a covering of the cane belt as possible. The industry has been divided into the geographical areas of South Coast, North Coast and Zululand, and further subdivided into magisterial districts.

Table I gives the annual rainfall for the past five years for each of the 54 recording centres.

Table II gives the rainfall by magisterial districts, and also for the three main divisions for each month of the year from June, 1958 to May, 1959.

Table III gives the calculated mean rainfall for the past 35 years, and the monthly percentage distribution. The actual rainfall for the year now under consideration is also given, as are the evaporation data taken at the Experiment Station, Mount Edgcombe.

Table IV gives the rainfall distribution according to growing periods for the past two years for all magisterial districts and the three main subdivisions of the industry.

Table V gives the monthly rainfall for the 54 centres for the past 4 years, the evaporation from an open water tank at the Experiment Station for the same period, and the amount by which evaporation exceeded rainfall each month.

TABLE I  
Rainfall for Fifty-four Centres

MAGISTERIAL DISTRICT	Rainfall for year 1st June 1954 to 31st May 1955	Rainfall for year 1st June 1955 to 31st May 1956	Rainfall for year 1st June 1956 to 31st May 1957	Rainfall for year 1st June 1957 to 31st May 1958	Rainfall for year 1st June 1958 to 31st May 1959
<b>Port Shepstone</b>					
Mehlomnyama . . . . .	54.59	46.05	51.80	50.41	46.46
<b>Umzinto</b>					
Hibberdene . . . . .	48.11	51.47	52.13	50.10	46.05
Umtwalume . . . . .	41.66	38.36	37.41	42.86	47.04
Sezela Mill . . . . .	50.35	41.08	49.30	54.31	38.10
Esperanza Mill . . . . .	49.72	43.03	47.73	55.50	40.72
Renishaw Mill . . . . .	54.79	41.26	56.41	58.00	36.73
Dumisa . . . . .	37.63	30.98	42.75	44.11	47.71
<b>Durban, Camperdown, etc.</b>					
Illovo Mill . . . . .	43.80	36.57	51.52	49.46	31.82
Umbumbulu . . . . .	38.72	39.74	41.51	41.52	42.61
Thornville . . . . .	36.11	29.03	40.08	38.39	36.57
<b>Inanda</b>					
Mount Edgcombe—					
Milkwood Kraal . . . . .	39.04	29.92	41.28	49.65	28.93
Experiment Station . . . . .	42.83	31.11	45.86	51.11	28.22
La Lucia . . . . .	46.34	35.02	46.26	53.62	29.18
La Mercy . . . . .	49.04	35.14	41.92	49.81	28.06
Canelands . . . . .	41.42	29.26	37.69	46.28	29.48
Tongaat—					
Frosterly . . . . .	47.28	33.96	47.36	48.23	32.81
Inyanninga . . . . .	49.04	32.89	41.14	46.65	31.84
Inanda . . . . .	47.21	37.91	48.47	52.14	46.06
Tongaat—					
Mwawine . . . . .	49.45	39.21	53.40	52.46	31.61
<b>Lower Tugela</b>					
Maidstone Mill . . . . .	48.20	37.99	52.45	46.70	32.84
Sinembe . . . . .	47.29	38.37	46.22	50.17	35.57
Upper Tongaat . . . . .	52.35	44.51	53.71	58.04	42.42
Fraser's Estate . . . . .	51.68	38.51	51.15	52.13	30.48
Chaka's Kraal Exp. Farm . . . . .	49.50	36.80	47.26	55.83	32.31
Chaka's Kraal . . . . .	51.92	39.84	53.63	56.76	39.21
Grouville . . . . .	45.28	29.09	37.71	48.29	34.51
Kearney . . . . .	57.46	39.89	52.13	62.85	41.22
Doornkop Mill . . . . .	41.84	33.09	39.53	44.97	34.47
Doornkop, Sprinz . . . . .	55.13	47.37	52.82	61.04	48.88
Gledhow Mill . . . . .	55.22	34.55	49.02	56.24	32.33
Darnall Mill . . . . .	53.18	39.40	46.08	56.37	33.49
Tugela Mouth . . . . .	59.11	45.70	58.25	66.27	36.44
<b>Mtunzini</b>					
Mandeni . . . . .	53.03	38.50	51.82	62.53	31.05
Amatikulu Mill . . . . .	48.08	41.01	46.39	50.63	28.47
Inyoni . . . . .	47.01	39.34	48.50	50.07	31.44
Mtunzini . . . . .	58.65	53.24	75.88	59.95	38.70
Blackburn . . . . .	52.97	42.15	48.19	51.44	33.18
<b>Eshowe</b>					
Entumeni Mill . . . . .	50.08	41.63	47.34	42.58	30.17
Eshowe . . . . .	55.79	52.04	48.51	53.92	35.96
Nkwaleni . . . . .	38.91	27.59	31.84	39.47	20.14
<b>Lower Umfolozi</b>					
Felixton Mill . . . . .	63.82	60.90	70.63	63.97	37.43
Empangeni West . . . . .	43.49	37.48	50.10	46.32	26.00
Empangeni Mill . . . . .	54.69	47.82	63.40	45.92	28.14
Logoza . . . . .	51.77	41.48	67.21	51.25	27.07
Ukulu Properties . . . . .	45.99	39.05	56.42	47.30	24.37
Mposa . . . . .	44.14	39.72	56.75	47.96	24.71
Kwambonambi . . . . .	44.47	43.26	66.56	51.92	29.42
Eteza . . . . .	45.38	38.49	59.30	45.78	27.30
<b>Hlabisa</b>					
Mtubatuba Mill . . . . .	33.36	29.15	53.19	48.00	25.43
U.L.O.A. . . . .	46.43	38.07	59.51	60.57	33.26
Nyalazi River . . . . .	44.43	28.35	40.70	50.86	24.87
Hluhluwe . . . . .	36.00	22.28	30.42	42.09	21.23
<b>Ubono—Mkuzi</b> . . . . .	26.63	23.87	23.87	32.21	20.18
<b>Piet Retief—Pongola</b> . . . . .	30.76	28.64	28.65	28.26	27.07
<b>Mean</b> . . . . .	<b>47.24</b>	<b>38.33</b>	<b>48.88</b>	<b>50.43</b>	<b>33.34</b>

TABLE II

## Rainfall in Inches by Districts for the Months of June, 1958, to May, 1959, inclusive

District	No. of Centres	June	July	1 9 5 8					1 9 5 9				Total June 1958 to May 1959	
				Aug.	Sept.	Oct.	Nov.	Dec.	Jan	Feb.	March	April		May
Port Shepstone ... ..	1	0.07	1.14	0.21	2.53	8.78	9.79	2.77	3.49	2.77	2.07	2.06	10.78	46.46
Umzinto ... ..	6	0.10	0.68	0.23	3.44	4.87	6.09	3.30	4.80	3.70	2.47	1.61	11.53	42.82
Durban, Pinetown etc.	3	0.55	0.23	0.16	3.11	2.13	5.53	3.46	5.84	3.77	1.04	1.18	10.00	37.00
<b>Mean: South Coast</b> ...	<b>10</b>	<b>0.23</b>	<b>0.59</b>	<b>0.21</b>	<b>3.25</b>	<b>4.44</b>	<b>6.29</b>	<b>3.30</b>	<b>4.98</b>	<b>3.63</b>	<b>2.00</b>	<b>1.52</b>	<b>11.00</b>	<b>41.44</b>
Inanda ... ..	9	0.56	0.19	0.34	5.14	1.69	5.89	4.14	3.16	3.49	0.89	1.02	5.29	31.80
Lower Tugela ... ..	13	0.44	0.25	0.42	5.15	1.70	6.31	4.80	3.57	4.69	1.05	1.14	6.69	36.48
<b>Mean: North Coast</b> ...	<b>22</b>	<b>0.49</b>	<b>0.22</b>	<b>0.39</b>	<b>5.14</b>	<b>1.70</b>	<b>6.14</b>	<b>4.53</b>	<b>3.40</b>	<b>4.20</b>	<b>0.98</b>	<b>1.09</b>	<b>6.28</b>	<b>34.56</b>
<b>Mean: South of Tugela</b>	<b>32</b>	<b>0.41</b>	<b>0.33</b>	<b>0.33</b>	<b>4.55</b>	<b>2.55</b>	<b>6.19</b>	<b>4.15</b>	<b>3.90</b>	<b>4.02</b>	<b>1.30</b>	<b>1.23</b>	<b>7.75</b>	<b>36.71</b>
Mtunzini ... ..	5	1.28	0.42	0.38	6.47	2.08	3.56	3.60	4.88	3.29	0.79	0.72	5.10	32.57
Eshowe ... ..	3	0.63	0.01	0.07	2.60	2.08	4.33	4.07	5.87	3.63	0.63	1.49	3.35	28.76
Lower Umfolozi... ..	8	1.44	1.58	0.59	3.71	3.10	2.48	3.39	4.27	1.74	1.05	0.68	4.03	28.06
Hlabisa ... ..	4	1.74	0.97	0.56	3.10	4.31	2.06	3.94	3.81	1.04	1.17	0.30	3.20	26.20
Ubombo ... ..	1	0.96	Nil	Nil	1.14	2.95	4.07	2.61	2.36	2.35	0.24	0.26	3.24	20.18
Piet Retief... ..	1	1.28	Nil	0.10	2.11	3.04	6.67	2.18	5.83	1.14	1.54	0.16	3.02	27.07
<b>Mean: Zululand and Piet Retief</b> ... ..	<b>22</b>	<b>1.32</b>	<b>0.85</b>	<b>0.42</b>	<b>3.88</b>	<b>2.94</b>	<b>3.16</b>	<b>3.54</b>	<b>4.53</b>	<b>2.22</b>	<b>0.94</b>	<b>0.69</b>	<b>3.95</b>	<b>28.44</b>
<b>General Mean</b> ... ..	<b>54</b>	<b>0.78</b>	<b>0.55</b>	<b>0.37</b>	<b>4.28</b>	<b>2.71</b>	<b>4.95</b>	<b>3.90</b>	<b>4.15</b>	<b>3.29</b>	<b>1.15</b>	<b>1.01</b>	<b>6.20</b>	<b>33.34</b>

TABLE III

## Rainfall and Evaporation Data

Month	Mean Percentage Rainfall Distribution 1924-1958	Computed Mean Rainfall for 54 Centres 1924-1958	Actual Rainfall for 54 Centres June, 1958, to May, 1959	Evaporation at Experiment Station	
				Mean 1936-1958	June, 1958, to May, 1959
June ... ..	3.92	1.49	0.78	2.35	2.22
July ... ..	2.84	1.08	0.55	2.52	2.11
August ... ..	3.61	1.37	0.37	2.91	2.65
September ... ..	6.82	2.59	4.28	3.59	2.92
October... ..	9.24	3.51	2.71	4.13	4.95
November ... ..	11.21	4.26	4.95	4.73	4.59
December ... ..	12.43	4.72	3.90	5.31	5.03
January ... ..	11.08	4.21	4.15	5.65	5.13
February ... ..	12.50	4.75	3.29	4.75	4.15
March ... ..	13.90	5.28	1.15	4.42	4.62
April ... ..	6.82	2.59	1.01	3.34	3.68
May ... ..	5.63	2.14	6.20	2.81	2.42
	100.00	37.99	33.34	46.51	44.47

TABLE IV

## Rainfall in Inches by Districts for the Two-year Period June, 1957, to May, 1959, inclusive

	No. of Centres	1957 Winter Growth June-August	1957 Early Growth Sept.-October	1957-1958 Optimum Growth Nov.-March	1958 Late Growth April-May	1958 Winter Growth June-August	1958 Early Growth Sept.-October	1958-1959 Optimum Growth Nov.-March	1959 Late Growth April-May	Total for Two Years June, 1957, to May, 1959
Port Shepstone ... ..	1	1.61	13.15	28.83	6.82	1.42	11.31	20.89	12.84	96.87
Umzinto ... ..	6	1.22	12.64	27.61	9.34	1.01	8.31	2.36	13.14	93.63
Durban, Pinetown etc.	3	1.47	8.68	26.68	6.29	0.95	5.24	19.64	11.18	80.13
<b>Mean: South Coast ...</b>	<b>10</b>	<b>1.33</b>	<b>11.50</b>	<b>27.45</b>	<b>8.17</b>	<b>1.03</b>	<b>7.69</b>	<b>20.20</b>	<b>12.52</b>	<b>89.89</b>
Inanda ... ..	9	1.76	9.90	30.49	7.84	1.08	6.84	17.57	6.32	81.80
Lower Tugela ... ..	13	2.29	13.82	31.23	7.72	1.11	6.85	20.42	8.10	91.54
<b>Mean: North Coast ...</b>	<b>22</b>	<b>2.07</b>	<b>12.21</b>	<b>30.93</b>	<b>7.77</b>	<b>1.10</b>	<b>6.85</b>	<b>19.26</b>	<b>7.37</b>	<b>87.56</b>
<b>Mean: South of Tugela</b>	<b>32</b>	<b>1.84</b>	<b>11.99</b>	<b>29.84</b>	<b>7.90</b>	<b>1.08</b>	<b>7.11</b>	<b>19.55</b>	<b>8.98</b>	<b>88.29</b>
Mtunzini ... ..	5	3.57	14.30	30.02	7.04	2.08	8.55	16.14	5.82	87.52
Eshowe ... ..	3	3.24	15.11	21.22	5.41	0.72	4.68	18.53	4.84	73.75
Lower Umfolozi... ..	8	4.81	15.20	23.65	6.39	3.61	6.81	12.93	4.71	78.11
Hlabisa ... ..	4	4.09	17.12	25.04	4.08	3.27	7.41	12.02	3.51	76.54
Ubombo ... ..	1	4.07	13.82	12.99	1.33	0.96	4.09	11.63	3.50	52.39
Piet Retief... ..	1	3.23	15.10	7.52	2.41	1.38	5.15	17.36	3.18	55.33
<b>Mean: Zululand and Piet Retief ...</b>	<b>22</b>	<b>4.08</b>	<b>15.27</b>	<b>23.80</b>	<b>5.57</b>	<b>2.58</b>	<b>6.82</b>	<b>14.40</b>	<b>4.64</b>	<b>77.16</b>
<b>General Average ...</b>	<b>54</b>	<b>2.75</b>	<b>13.33</b>	<b>27.38</b>	<b>6.95</b>	<b>1.69</b>	<b>6.99</b>	<b>17.45</b>	<b>7.21</b>	<b>83.75</b>
Computed mean for 35 years ... ..	54	3.94	6.10	23.22	4.73	3.94	6.10	23.22	4.73	75.98

TABLE V

## Rainfall and Evaporation in Inches for the Past Four Years

Month	1955 - 1956			1956 - 1957			1957 - 1958			1958 - 1959		
	Evaporation	Rainfall	Rainfall Deficiency	Evaporation	Rainfall	Rainfall Deficiency	Evaporation	Rainfall	Rainfall Deficiency	Evaporation	Rainfall	Rainfall Deficiency
June ... ..	2.30	0.74	1.56	2.19	1.25	0.94	2.39	0.31	2.08	2.22	0.78	1.45
July ... ..	2.65	0.12	2.53	2.30	0.28	2.02	2.07	1.34	0.73	2.11	0.55	1.56
August ... ..	3.32	0.58	2.74	3.03	2.09	0.94	3.00	1.10	1.90	2.65	0.37	2.28
September ... ..	4.16	2.96	1.20	3.71	2.98	0.73	3.08	7.15	0.00	2.92	4.28	0.00
October ... ..	3.56	4.13	0.00	3.68	3.32	0.36	4.44	6.17	0.00	4.95	2.71	2.24
November ... ..	4.18	5.36	0.00	4.24	4.42	0.00	4.43	3.93	0.50	4.59	4.95	0.00
December ... ..	4.89	3.59	1.30	4.39	12.95	0.00	5.27	4.17	1.10	5.03	3.90	1.03
January ... ..	7.19	0.59	6.60	5.82	3.91	1.91	4.89	9.26	0.00	5.13	4.15	0.98
February ... ..	5.12	9.79	0.00	5.08	5.89	0.00	4.36	7.25	0.00	4.15	3.29	0.86
March ... ..	4.15	7.26	0.00	4.15	4.58	0.00	4.83	2.80	2.03	4.62	1.15	3.47
April ... ..	3.45	2.11	1.34	2.89	6.40	0.00	3.50	6.45	0.00	3.68	1.01	2.67
May ... ..	3.06	1.10	1.96	2.74	-0.72	2.02	2.46	0.50	1.96	2.42	6.20	0.00
<b>Total ... ..</b>	<b>48.03</b>	<b>38.33</b>	<b>19.23</b>	<b>44.22</b>	<b>48.88</b>	<b>8.92</b>	<b>44.72</b>	<b>50.43</b>	<b>10.30</b>	<b>44.47</b>	<b>33.34</b>	<b>16.54</b>

### Comments on Rainfall

Rainfall for the year ending 31st May, 1959 was 33.34 inches, which was fairly well below our mean annual rainfall of 37.99 inches. This deficiency was the result of winter and autumn droughts. The total rainfall for the three months of June, July and August was 1.70 inches (mean 4.34 inches) and that for March and April was 2.16 inches (mean 8.75 inches). Spring rains were somewhat delayed, and soaking rains did not fall until towards the middle of September. The ensuing summer months, however, enjoyed a satisfactory and fairly well-distributed rainfall. The autumn drought mentioned previously was followed by an exceptionally heavy flash flood along parts of the South Coast during May.

June, 1958 was a cold, dry month. Slight frost damage was reported from some areas, and patches of cane on the shallower soils suffered from drought. July was the third successive month with below average rainfall, with the result that the browning-off of cane increased. These drought symptoms were exaggerated somewhat, due to the fact that July was warmer than usual. August brought only 0.37 inches of rain, and the crop was by this time suffering a severe winter drought. The four months of May, June, July and August 1958 had a total of only 2.20 inches of rain, compared with a mean of 6.03 inches for this period. Cane actually died out in places, due to lack of moisture, and rain was urgently needed. Good rains towards the middle of September saved the situation, but most of the industry was in need of further moisture by the end of the month. Although the October rainfall was below average, except for parts of the South Coast, the cane crop was, as a whole, reported to be in good condition. Throughout most of the industry November and December brought the hot humid conditions needed for rapid growth. A large part of Zululand, however, did not receive enough rain for optimum growth.

During January, 1959, excellent rains fell along the South Coast and over most of Zululand, but the North Coast and Empangeni areas were rather dry. February was a dryish month for the industry, and by March a severe autumn drought had set in. Only once in the past 35 years has the rainfall for March been less than the 1.16 inches which fell in that month for 1959. Retarded growth, and drought injury was reported from many centres. April brought little respite from the drought. Light rains gave temporary relief along parts of the South Coast. The recorded rainfall for the combined months of February, March and April has not been lower than it was this year at 5.47 inches. Arid conditions prevailed until the middle of May, when sufficient unseasonal rains were recorded throughout the industry to break the drought. Parts of the South Coast experienced a severe flash flood which

caused considerable loss of life, and damage to property, communications, and transport. Stands of cane in the affected areas were flattened, washed out, or buried. The acreage concerned was small, however, and the bulk of the crop is, at this stage, in a much improved condition.

Summarising the rainfall over the past two years, the following conditions prevailed. A winter drought from May to August, 1957 adversely affected the crop. Heavy rains during the spring of 1957 provided adequate moisture, and floods were recorded in places. Following through until May, hot, moist conditions allowed excellent cane growth. The period May to August 1958 saw the industry suffering another severe winter drought. From mid-September until the end of the year, the cane made good growth. An unprecedented autumn drought set in shortly after the beginning of 1959, and this was not relieved until mid-May, when floods occurred on the South Coast, and the rest of the industry received sufficient unseasonal rain to keep the cane going. Despite the undoubted deficiencies and excesses of rainfall suffered at various times by the present crop, it is in remarkably good condition at this stage, but would benefit from more moisture.

### Temperatures

The mean screen temperature at the Experiment Station for the year ending 31st May, 1959 was 69.0°F, which is only 0.2°F above the 1928-58 average of 68.8°F. Temperatures for an important part of the growing season, October to January, were above normal and led to excellent growth. Elevated temperatures in March and April, on the other hand, helped accentuate the overall dryness of the crop.

### Evaporation

Evaporation from an open water surface totalled 44.47 inches compared with a mean of 46.51 inches for the period 1936-58. There were only 3 months in the year under review when the rainfall exceeded evaporation, and the accumulated rainfall deficiency amounted to 16.54 inches, which is above average.

### Hours of Sunshine

The sucrose content of a cane crop appears to have a direct relationship with the hours of sunshine experienced during the period March to June, and an inverse relationship with the precipitation during this period. For 1959, the hours of sunshine for this period were above normal, while the rainfall was below average. For the whole year, the amount of sunshine recorded at the Experiment Station was 101.5 per cent of normal.

TABLE VI

The following are the Screen Temperatures by Months in Degrees Fahrenheit at the Experiment Station for the year June, 1958, to May, 1959, compared with the Means for the Period 1928 to 1958

Month	THIS PERIOD					AVERAGE 1928 TO 1958 INCLUSIVE			
	Maximum	Minimum	Mean	Plus or Minus Average	Daily Range	Maximum	Minimum	Mean	Range
June ... ..	72.5	50.9	61.7	-1.0	21.6	72.9	52.5	62.7	20.4
July ... ..	73.2	53.1	63.1	+1.0	20.1	72.4	51.8	62.1	20.6
August ... ..	72.7	53.4	63.1	-0.5	19.3	73.2	53.9	63.6	19.3
September ... ..	72.5	57.7	65.1	-0.7	14.8	74.3	57.2	65.8	17.1
October... ..	75.5	61.3	68.5	+0.1	14.2	75.9	60.8	68.4	15.1
November ... ..	78.3	66.2	72.3	+1.7	12.1	77.8	63.4	70.6	14.4
December ... ..	80.2	67.3	73.8	+0.9	12.9	80.0	65.7	72.9	14.3
January ... ..	81.7	66.7	74.3	+0.2	15.0	81.0	67.2	74.1	13.8
February ... ..	81.0	67.6	74.3	-0.4	13.4	81.6	67.7	74.7	13.9
March ... ..	80.6	66.0	73.4	+0.2	14.6	80.3	66.0	73.2	14.3
April ... ..	79.7	63.7	71.8	+1.5	16.0	78.3	62.2	70.3	16.1
May ... ..	75.7	56.8	66.3	-1.3	18.9	76.0	57.1	67.6	16.9
<b>Means ... ..</b>	<b>77.0</b>	<b>61.0</b>	<b>69.0</b>	<b>+0.2</b>	<b>16.1</b>	<b>77.0</b>	<b>60.5</b>	<b>68.8</b>	<b>16.4</b>

TABLE VII

The following Table gives the Mean Monthly Earth Temperatures

Month	Experiment Station 1935-58			Experiment Station June 1958 to May 1959		
	1 foot	2 feet	4 feet	1 foot	2 feet	4 feet
June ... ..	64.1	66.8	69.6	62.8	65.3	69.1
July ... ..	62.7	64.7	67.0	62.6	63.9	66.4
August ... ..	64.5	65.7	66.7	63.7	64.4	66.0
September ... ..	67.7	68.2	68.2	66.4	66.7	66.9
October ... ..	70.7	70.9	70.3	70.2	70.2	69.4
November ... ..	73.5	73.4	72.7	74.5	73.9	71.8
December ... ..	76.4	76.2	74.6	77.5	77.2	74.8
January ... ..	78.7	79.0	76.8	77.5	77.5	75.9
February ... ..	79.6	79.6	78.1	78.4	78.3	76.5
March ... ..	78.1	78.9	78.3	78.1	78.1	77.2
April ... ..	74.8	76.3	76.7	76.1	76.6	76.8
May ... ..	69.4	71.7	73.6	68.5	69.8	72.7
<b>Mean ... ..</b>	<b>71.7</b>	<b>72.6</b>	<b>72.7</b>	<b>71.4</b>	<b>71.8</b>	<b>72.0</b>

### Summary and Conclusions

Although the rainfall this year has been below average, fairly good cane growth has taken place. Droughts and floods experienced during the year have appeared serious at the time, but their effect on the ultimate cane yield will probably be less than

expected. One reason for this is that the preceding year's excellent growing conditions have given the present crop a good start.

Cane yields per acre will probably be lower than last season, but the sucrose per cent cane should be higher.