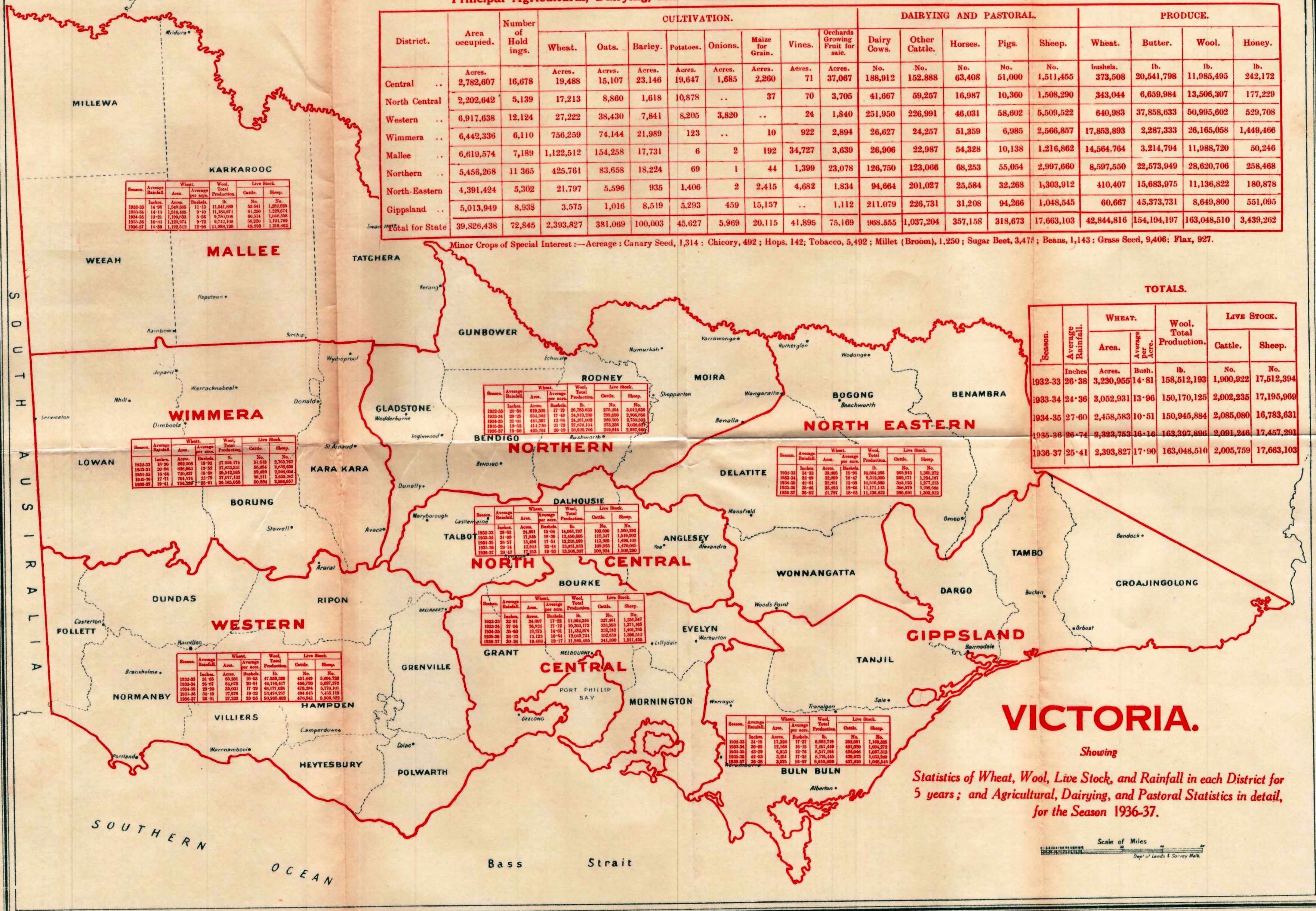
Principal Agricultural, Dairying, and Pastoral Features of the various Districts of the State of Victoria, Season 1936-37.

District.	Area occupied.	Number of Holdings.	CULTIVATION.								DAIRYING AND PASTORAL.					PRODUCE.			
			Wheat.	Oats.	Barley.	Potatoes.	Onions.	Maize for Grain.	Vines.	Orchards Growing Fruit for sale.	Dairy Cows.	Other Cattle.	Horses.	Pigs.	Sheep.	Wheat.	Butter.	Wool.	Honey.
	Acres.		Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	No.	No.	No.	No.	No.	bushels.	lb.	lb.	lb.
Central ..	2,782,607	16,678	19,488	15,107	23,146	19,647	1,685	2,260	71	37,067	188,912	152.888	63.408	51,000	1,511,455	373,508	20,541,798	11,985,495	242,172
North Central	2,202,642	5,139	17,213	8,860	1,618	10,878	..	37	70	3,705	41,667	59,257	16,987	10,360	1,508,290	343,044	6,659.984	13,506,307	177,229
Western ..	6,917,638	12.124	27,222	38,430	7,841	8,205	3,820	..	24	1,840	251,950	226,991	46.031	58,602	5,509,522	640,983	37,858,633	50,995,602	529,708
Wimmera ..	6,442,336	6,110	756,259	74,144	21,989	123	..	10	922	2,894	26,627	24,257	51,359	6,985	2,566,857	17,853,893	2,287,333	26,165,058	1,449,466
Mallee ..	6,619,574	7,189	1,122,512	154,258	17,731	6	2	192	34,727	3,639	26,906	22,987	54,328	10,138	1.216,862	14,564.764	3.214,794	11,988,720	50,246
Northern ..	5,456,268	11 365	425.761	83.658	18.224	69	1	44	1,399	23,078	126,750	123,066	68,253	55,054	2,997,660	8,597,550	22,573,949	28,620,706	258,468
North-Eastern	4,391,424	5,302	21,797	5.596	935	1,406	2	2,415	4,682	1.834	94,664	201,027	25,584	32,268	1,303,912	410,407	15,683,975	11,136,822	180,878
Gippsland ..	5,013,949	8,938	3.575	1,016	8,519	5.293	459	15,157	..	1.112	211.079	226,731	31,208	94,266	1,048,545	60,667	45,373,731	8,649,800	551,095
Total for State	39,826,438	72,845	2,393,827	381,069	100,003	45.627	5,969	20.115	41.895	75.169	968.555	1,037,204	357,158	318,673	17,663,103	42,844,816	154,194,197	163,048,510	3,439,262

Minor Crops of Special Interest :—Acreage : Canary Seed, 1,314 : Chicory, 492 ; Hops. 142; Tobacco, 5,492 ; Millet (Broom), 1,250 ; Sugar Beet, 3,475 ; Beans, 1,143 ; Grass Seed, 9,406; Flax, 927.

TOTALS.

Season.	Average Rainfall.	Wheat.		Wool. Total Production.	Live Stock.	
		Area.	Average per Acre.		Cattle.	Sheep.
	Inches	Acres.	Bush.	lb.	No.	No.
1932-33	26·38	3,230,955	14·81	158,512,193	1,900,922	17,512,394
1933-34	24·36	3,052,931	13·96	150,170,125	2,002,235	17,195,969
1934-35	27·60	2,458,583	10·51	150,945,884	2,085,080	16,783,631
1935-36	26·74	2,323,753	16·16	163,397,896	2,091,246	17,457,291
1936-37	25·41	2,393,827	17·90	163,048,510	2,005,759	17,663,103



VICTORIA.

Showing

Statistics of Wheat, Wool, Live Stock, and Rainfall in each District for 5 years; and Agricultural, Dairying, and Pastoral Statistics in detail, for the Season 1936-37.

PRODUCTION.

LAND SETTLEMENT, ETC.

The total area of the State is 56,245,760 acres. On 31st December, 1936, this comprised :—

	Acres.
Lands alienated in fee-simple	27,056,281
Lands in process of alienation	6,000,645
Crown lands	23,188,834
Total	56,245,760

The Crown lands comprise—

Permanent forests (under Forests Act) ..	4,071,892
Timber reserves (under Forests Act) ..	732,222
State Forests and Timber reserves (under Land Act)	330,283
Water reserves	309,533
Reserves for Agricultural Colleges, &c. ..	88,649
Reserves in the Mallee	410,000
Other reserves	398,798
Roads	1,794,218
Water frontages, beds of rivers, lakes, &c. ; unsold land in cities, towns, and boroughs	4,044,838
Land in occupation under—	
Perpetual leases	82,888
Other leases and licences	33,010
Temporary grazing licences	5,447,387
Unoccupied	5,445,116
Total	23,188,834

Alienation of land.

In the following table are shown the area of Crown lands sold absolutely and conditionally, and the area of lands alienated in fee-simple during the last six years. A portion of the area conditionally sold reverts to the Crown each year in consequence of the non-fulfilment of conditions by the selectors. The lands alienated each year include areas selected in previous years.

ALIENATION OF CROWN LANDS, 1931 TO 1936.

Year.	Area of Crown Lands Sold.			Crown Lands alienated in Fee-simple.	
	Absolutely, at Auction, &c.	Conditionally to Selectors.		Area.	Purchase Money.
		Mallee.	Other.		
	Acres.	Acres.	Acres.	Acres.	£
1931 ..	5,892	131,691	58,575	67,131	215,526
1932 ..	3,297	43,416	44,255	62,996	143,623
1933 ..	3,907	18,991	38,120	69,357	73,580
1934 ..	4,661	30,020	38,706	143,851	119,219
1935 ..	4,545	14,989	29,335	288,443	199,339
1936 ..	5,290	6,005	28,435	108,011	88,937

Amount realized by sale of Crown lands.

From the period of the first settlement of the State to the end of 1936 the amount realized by the sale of Crown lands was £36,161,107, which represents an average of £1 1s. 11d. per acre for all lands alienated or in process of alienation. Payment of a considerable portion of this amount extended over a series of years without interest, upon very easy terms.

Lands remaining for disposal.

The next table shows the whole of the unalienated lands of the Crown remaining for disposal :—

CROWN LANDS REMAINING FOR DISPOSAL ON 31ST DECEMBER, 1936.

Location.	Classification.						Total.
	Agricultural and Grazing.					Auriferous.	
	First.	Second.	Third.	Fourth.	Pastoral.		
County.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Anglesey	229	2,517	65,416	..	..	2,000	70,162
Buln Buln	9,507	42,430	52,364	..	..	..	104,301
Bogong	..	..	190,922	..	170,680	..	361,602
Benambra	51	..	264,441	..	243,596	87,930	596,018
Bourke	..	142	25	..	..	..	167
Bendigo	83	541	2,952	..	..	3,140	6,716
Borung	..	12,207	40,422	..	26,000	87,126	165,755
Croajingolong ..	2,160	1,437	549,083	..	840,670	13,850	1,407,200
Dargo	..	..	97,128	..	431,600	70,000	598,728
Delatite	177	14,804	87,768	..	..	60,088	162,837
Dalhousie	20	686	1,202	..	..	443	2,351
Dundas	..	..	64,420	4,700	15,754	..	84,874
Evelyn	19	279	10,535	..	..	1,525	12,358
Follett	..	..	122,250	4,325	29,136	..	155,711
Gladstone	556	1,364	2,536	2,515	..	8,992	15,963
Grant	20	75	2,146	..	..	7,014	9,255
Grenville	..	848	70	..	..	5,297	6,215
Heytesbury ..	..	935	124,102	200	..	..	125,237
Kara Kara	86	96	1,776	2,769	9,000	107	13,834
Karkarooc	..	39	..	..	..	..	39
Lowan	..	654	138,343	22,040	9,000	..	170,037
Moira	500	..	5,889	..	..	1,500	7,889
Mornington ..	..	1,035	11,603	..	..	..	12,638
Normanby	..	..	107,823	..	..	..	107,823
Polwarth	13,768	14,754	22,635	142	..	..	51,299
Rodney	200	180	..	..	..	2,000	2,380
Ripon	..	380	22,746	..	..	2,910	26,036
Tambo	..	..	202,458	..	370,846	900	574,204
Tanjil	..	..	106,659	..	351,460	67,000	525,119
Talbot	301	700	182	..	65,000	20,938	87,121
Tatchera	235	70	..	..	..	..	305
Villiers	..	..	1,943	..	..	..	1,943
Wonnangatta ..	..	..	147,850	..	846,400	..	994,250
Total ..	27,912	96,173	2,447,689	36,691	3,409,142	442,760	6,460,367

Throughout the State	Swamp or reclaimed lands	2,309
" "	Lands which may be sold by auction	2,896
The north-western portion of the State	Mallee lands available for selection	33,071
	Mallee lands (such as are suitable to be eventually classified for selection)	4,393,860
Total area remaining for disposal		10,892,503

Temporary occupancy of much of the land included in the above statement has been granted to approved applicants under grazing licences.

Transfer of Land Act.

The "Torrens System" whereby persons acquiring possession of land may receive a clear title, was introduced into Victoria in 1862. The system has been the means of simplifying procedure in connexion with the transfer of land.

It gives a title to the transferee free of any latent defect and reduces the cost of dealing in real estate by reason of the simplicity of the procedure. All land alienated since 1862 is under the operation of the Transfer of Land Acts, and the Crown grant issues through the Titles Office; but, to bring under the Act land that was parted with prior to that year (5,142,321 acres), application must be made accompanied by strict proofs of the applicant's interest in the property. During 1936 there were submitted 200 applications to have brought under the Act land amounting in area to 984 acres, and in value to £177,628; while the land actually brought under the Act during the year by application was 6,640 acres valued at £324,056. Up to the end of 1936 there had been brought under the Act 3,258,312 acres valued at £72,381,414. The area of the land still under the Old Law System at the end of 1936 was 1,884,009 acres. A summary of dealings under the Transfer of Land Acts will be found on page 200.

Assurance Fund.

When application is made to have land brought under the Transfer of Land Acts, a contribution to the Assurance Fund constituted under the provisions of that Act of ½d. in the £1 on the value of the land is levied on the applicant to assure and indemnify the Government in granting a clear title against all the world, as some other person may have a latent interest in the property, and it may be necessary for the Government to recompense such person out of the Fund for the loss of his interest. Receipts of the Fund during 1936–37 comprised contributions £1,430, and interest on stock £3,269. There were no claims on the Fund during the year, but the sum of £5,095 was paid out in accordance with section 3 of the *Special Funds Act* 1920 to provide for the interest on loan moneys expended on University buildings. The balance at the credit of the Assurance Fund on 30th June, 1937, was £113,926. The amount paid up to 30th June, 1937, as compensation and for judgments recovered, including costs, was £9,856.

CLOSER SETTLEMENT AND DISCHARGED SOLDIERS' SETTLEMENT.

The first estate acquired for closer settlement in Victoria was purchased in 1900 under authority of the *Land Act* 1898 which empowered the Government to purchase by agreement private lands for this purpose. Under this Act five estates totalling 33,660 acres were acquired. In 1904, a Closer Settlement Act was passed and a Board appointed to administer it, with authority to acquire land by agreement, or, where necessary, compulsorily.

In 1906 the State Rivers and Water Supply Commission, established under the *Water Act* 1905, came into operation, and in 1909 closer settlement in irrigation areas commenced. Administration in

these areas was placed under the direct control of the Water Supply Commissioners by the *Closer Settlement Act* 1912.

Up to 30th June, 1917, the area acquired totalled 571,156 acres and the area settled, 507,500 acres. In that year the first Discharged Soldiers' Settlement Act was passed and thereafter the settlement of discharged soldiers was given precedence by the Government. At 30th June, 1932, the net area acquired for soldier settlement was 2,270,333 acres (2,179,091 acres settled), and for civilian settlers 1,094,415 acres (1,058,360 acres settled). Thus, of the land acquired for closer and soldier settlement, 84 per cent. has been settled since 1917. The unstable conditions subsequent to 1917 proved most unfavorable to successful settlement, and the consequent loss to the settlers and to the State has been severe. Measures which were taken to improve conditions of the soldier settlers include the appointment by the Victorian Government of a Royal Commission in 1925, the establishment of inquiry boards in 1926 and 1927, and the appointment by the Commonwealth Government of Mr. Justice Pike in 1927 to inquire into soldier settlement in all the States. Up to 30th June, 1937, concessions by the Commonwealth and the State to soldier settlers in Victoria amounted to £13,611,768.

An Act to amend existing closer settlement legislation was passed by Parliament in 1932 for the purpose of giving effect to recommendations made for the relief of settlers. This amending Act, "The *Closer Settlement Act* 1932 No. 4091," was assented to on 29th December, 1932. Under its provisions a Closer Settlement Commission of five members superseded the Closer Settlement Board, and assumed the powers and obligations of the State Rivers and Water Supply Commissioners in respect of the settlement and occupation of irrigable lands. Provision was made for the consolidation into one debt of the liabilities of each settler at 30th June, 1932. The unpaid balance on account of land improvements and all arrears of interest were thereby brought together into one account. The Commission was further empowered to adjust, during the period of five years, commencing on 1st July, 1932, the annual payment due by the settlers on account of the consolidated debt. In making any adjustment the Commission was required to take into consideration (*a*) ruling prices for farm products, (*b*) seasonal conditions, (*c*) requirements for maintenance of the settler and his family, (*d*) the means and ability of the settler to make any adjusted payment, (*e*) efforts made by the settler to meet his liability, and (*f*) any other factors which in the opinion of the Commission were proper to be considered. At the end of the period of five years provision is made for the assessment by the Commission of the liabilities of settlers on account of land and advances, and for the writing off of the difference between the amount of the revaluation of the land and improvements and the sum of the capital value at which the land was sold and the amount of advances for improvements and arrears of interest. The

Commission is given discretionary power to reduce the amount to be written off if it is satisfied that the value of the land and improvements has been adversely affected by the failure of the settler to work the land or to maintain the improvements in a proper manner.

Details relating to the conditions under which settlers may acquire blocks and advances may be obtained on application to the Closer Settlement Commission.

Estates purchased. A complete statement of all estates acquired by the Closer Settlement Board including those purchased by the State Rivers and Water Supply Commission (*i.e.*, estates in irrigable areas), will be found in the report of the Closer Settlement Board for the year ended 30th June, 1930. The purchase of properties has been practically suspended since 1931.

A summary of the lands acquired is given in the following statement :—

LANDS ACQUIRED FOR CLOSER SETTLEMENT AND DISCHARGED SOLDIERS' SETTLEMENT TO 30TH JUNE, 1937.

—	Closer Settlement.		Discharged Soldiers' Settlement.	
	Area.	Cost.	Area.	Cost.
	acres.	£	acres.	£
Land purchased from private owners	819,378	6,069,931	1,763,241	13,361,266
Crown lands taken over ..	113,744	56,794	666,384	547,324
Total area and cost of lands acquired	933,122	6,126,725	2,429,625	13,908,590
Expenses prior to disposal	..	93,192	..	119,356
Cost of Public Works effected	..	478,042	..	1,043,180
Total area and cost as at 30th June, 1937 ..	933,122	6,697,959	2,429,625	15,071,126

NOTE.—Of the lands acquired for Closer Settlement, 121,876 acres, valued at £1,168,331, were transferred and used for Discharged Soldiers' Settlement. On the other hand, 495,646 acres, valued at £4,014,276, acquired for Discharged Soldiers' Settlement, were transferred and used for Closer Settlement.

Financial Summary of Discharged Soldiers' Settlement and Closer Settlement.

The liabilities and assets of Discharged Soldiers' Settlement and Closer Settlement at 30th June, 1937, are shown in the following statement :—

FINANCIAL SUMMARY OF DISCHARGED SOLDIERS' SETTLEMENT AND CLOSER SETTLEMENT AT 30TH JUNE, 1937.

—	Discharged Soldiers' Settlement.	Closer Settlement.	Total.
Number of settlers—			
At present receiving assistance ..	5,203	5,181	10,384
Purchasers under Contract of Sale ..	537	359	896
Repaid in full	695	4,696	5,391
Cancelled, transferred and surrendered	6,442	6,377	12,819
Total number of settlers who have received assistance ..	12,877	16,613	29,490
Loan liability—	£	£	£
Loans raised—Australian Consolidated Inscribed Stock	25,983,743	13,674,362	39,658,105
Less Redemptions	174,101	1,355,582	1,529,683
Less Securities transferred to Commonwealth Government.. ..	2,160,960	..	2,160,960
Outstanding Liability of the Commission	23,648,682	12,318,780	35,967,462
Repayment of principal used for payment of interest and working expenses	4,247,849	1,063,080	5,310,929
Payments to State Loans Repayment Fund	1,386,323	1,343,659	2,729,982
Average rate of interest payable on loans at 30th June, 1937 ..	£4/4/0%	£3/19/2%	..
Principal outstanding on land and advances (consolidated)—	£	£	£
Selling value of land and improvements	10,336,629	8,659,342	18,995,971
Advances to settlers	9,084,179	5,199,275	14,283,454
	19,420,808	13,858,617	33,279,425
Less Principal repaid	5,407,795	4,539,047	9,946,842
Outstanding Principal Liability of settlers	14,013,013	9,319,570	23,332,583

FINANCIAL SUMMARY OF DISCHARGED SOLDIERS' SETTLEMENT AND CLOSER SETTLEMENT AT 30TH JUNE, 1937—*continued.*

—	Discharged Soldiers' Settlement.	Closer Settlement.	Total.
	£	£	£
Instalments of interest charged to settlers	7,815,218	6,476,496	14,291,714
Less interest paid by settlers	6,050,312	5,359,954	11,410,266
Arrears of interest (consolidated)	1,764,906	1,116,542	2,881,448
Less Suspense account—adjustment of instalments (Sec. 31, Act 4091, &c.)	476,000	274,000	750,000
Net Interest Arrears	1,288,906	842,542	2,131,448
Total payment by settlers—			
Principal	5,407,795	4,539,047	9,946,842
Interest	6,050,312	5,359,954	11,410,266
Total	11,458,107	9,899,001	21,357,108
Amounts written off settlers' accounts—			
Interest—Adverse circumstances	1,342,583	..	1,342,583
Excess cost of buildings	41,574	..	41,574
Reduction in valuation of land and improvements	249,978	196,057	446,035
Bad debts, &c. (*a*)	3,246,620	1,754,537	5,001,157
Provision for amounts to be written off (Sec. 31, Act 4091, &c.)	2,749,377	1,538,128	4,287,505
Total	7,630,132	3,488,722	11,118,854
For financial year 1936-37—			
Interest paid	1,016,493	617,393	1,633,886
Administrative expenses	78,015	83,766	161,781
Interest due by settlers and others	885,832	527,201	1,413,033
Interest received from settlers and others (*b*)	692,524	389,020	1,081,544

NOTES.

	£	£	£
(*a*) Includes—			
Bad debts	3,048,982	1,653,448	4,702,430
Loss and remission of interest	28,093	20,610	48,703
Loss on realization	169,545	69,845	239,390
Concessions to British Army officers from India	..	10,634	10,634
	3,246,620	1,754,537	5,001,157
(*b*) Includes—			
Interest from lessees and municipalities	511,699	338,416	850,115
Interest from Closer Settlement	127,668	..	127,668
Interest on investments	..	3,875	3,875
Interest on State Loans Repayments Fund	53,157	46,729	99,886
	692,524	389,020	1,081,544

Extent of Closer Settlement.

The extent of closer settlement effected up to 30th June, 1937, is given in the next statement :—

SUMMARY OF CLOSER SETTLEMENT TO 30TH JUNE, 1937.

Lands Acquired.	Dry Areas.	Irrigable Areas.	Total.
	Acres.	Acres.	Acres.
Area settled	1,211,400	174,171	1,385,571
Area available for—			
Farm Lands and Agricultural Labourers' Allotments	25,548	288	25,836
Workmen's Homes	8	..	8
Public Competition, Auction, &c. ..	713	..	713
Area not yet available for settlement ..	..	1,027	1,027
Loss of area on subdivision (roads, channels, reserves, &c.)	10,681	4,932	15,613
Total area acquired	1,248,350	180,418	1,428,768

UTILIZATION OF SETTLED AREAS.

Classification.	Holdings.	Average Capital Value.	Average Area.	Total Area.
	No.	£	Acres.	Acres.
Farms—				
Dry Areas	4,277	1,534	248	1,060,651
Irrigable Areas	2,194	858	58	127,689
Agricultural Labourers' Allotments—				
Dry Areas	153	133	17	2,592
Irrigable Areas	149	117	6	892
Transfers to Discharged Soldiers' Settlement—				
Dry Areas	345	1,827	245	84,439
Irrigable Areas	561	977	67	37,436
Workmen's Homes—				
Dry Areas	1,079	89	¾	792
Irrigable Areas	..	..	..	..
Public Competition, Auction, &c.—				
Dry Areas	..	..	..	62,926
Irrigable Areas	..	..	..	8,154
Total Dry Areas	5,854	..	..	1,211,400
Total Irrigable Areas ..	2,904	..	..	174,171
GRAND TOTAL ..	8,758	..	..	1,385,571

Extent of Soldier Settlement.

The extent of settlement at 30th June, 1937, is given in the table which follows :—

SUMMARY OF DISCHARGED SOLDIERS' SETTLEMENT TO 30TH JUNE, 1937.

—	Dry Areas.	Irrigable Areas.	Total.
	Acres.	Acres.	Acres.
Area of land settled	2,347,018	95,120	2,442,138
Area of land available	218	531	749
Area of land acquired but not yet available ..	1,525	17,628	19,153
Sales by Auction, &c.	89,287	8,414	97,701
Total land acquired	2,438,048	121,693	2,559,741
Less land transfered to Closer Settlement	469,074	26,572	495,646
Total net area acquired to 30th June, 1937	1,968,974	95,121	2,064,095
Farms, Number of	7,892	1,994	9,886
Average area—acres	297	48	..
Average capital value	£1,638	£807	..

WATERWORKS.

State Expenditure on Waterworks.

All Victorian waterworks are controlled by official bodies, either State or local. The following table shows State expenditure on works under the control of the State Rivers and Water Supply Commission, as well as grants and loans to local bodies. In addition to free grants to local bodies, large sums have been written off their liabilities. The following information has been taken from the Annual Report of the State Rivers and Water Supply Commission.

STATE EXPENDITURE AND LOAN LIABILITY ON WATERWORKS* TO 30TH JUNE, 1937.

Description of Works.	Capital Expenditure to 30th June, 1937.	Loan Redemption and Capital Repaid.	Loan Liability at 30th June, 1937.
	£	£	£
Waterworks Districts	6,361,702	109,355	6,252,347
Irrigation and Water Supply Districts	4,536,854	43,878	4,492,976
Goulburn Channel Works (Free Headworks excluded)	1,325,432	3,212	1,322,220
Pyke's Creek, Melton and Distributary Works ..	262,468	747	261,721
Koo-wee-rup, Cardinia, and other Flood Protection Schemes	447,632	4,374	443,258
Eildon Reservoir and Waranga Reservoir Enlargement	2,538,809	27,559	2,511,250
Maffra-Sale Irrigation and Water Supply Districts ..	1,267,079	916	1,266,163
Millewa Waterworks Districts	519,294	31	519,263
Red Cliffs Irrigation and Water Supply District ..	792,978	237	792,741
Bellarine Peninsula	475,068	454	474,614
Campaspe and Loddon River Storages	124,938	2,665	122,273
Free Headworks	1,226,806	450	1,226,356
River Murray Agreement Works	2,757,777	30,274	2,727,503
Surveys, &c.	291,538	33,765	257,773
Murray Valley Districts (proposed)	100,196	379	99,817
Abolished Irrigation and Waterworks Trusts ..	31,710	30	31,680
Free Grants to Local Authorities	142,357	..	142,357
Loan Flotation Expenses	753,895	..	753,895
Waterworks Trusts (including First Mildura)	1,918,338	440,561	1,477,777†
Municipal Waterworks	901,718	184,681	717,037†
Geelong Waterworks (prior to disposal by Government in 1908)	460,836	300,235	160,601
TOTAL	27,237,425	1,183,803	26,053,622

* Excluding Melbourne and Metropolitan Board of Works, Geelong Waterworks and Sewerage Trust, and the Ballarat Water Commission, particulars of which appear in part "Local Government" of this issue.

† With the exception of capital written off by Parliament, these amounts are a liability of the respective authorities. After deduction of same the loan liability of Waterworks Trusts was £1,359,896, and of Municipalities £559,042. The net loan liability of the State after deducting the amount in the National Debt Sinking Fund (£962,487) was £25,159,373.

IRRIGATION.

Progress of Irrigation.

Prior to 1905 the management of irrigation in Victoria was in the hands of various Irrigation Trusts, which were financed by the State. These Trusts drifted into financial difficulties and the State was compelled to assume control. In the year mentioned, by the authority of Parliament, the State Rivers and Water Supply Commission was constituted and entrusted with the management of all irrigation works, except those controlled by the First Mildura Trust. This authority is embodied in the

Water Act 1928—which consolidates the Water Acts of 1915, 1916, and 1918, and the *Ballarat Water Commissioners Act* 1921.

The particulars in the following statement, while not covering the whole of the activities of the State Rivers and Water Supply Commission, furnish a general idea of the development of water conservation and distribution, and of drainage and flood protection in districts under its administration :—

——	At 30th June, 1907.	At 30th June, 1937.
Irrigation Districts—		
Number of Districts administered	10	31
Number of Districts having Water Rights ..	Nil	22
Total of such Water Rights (acre feet)	Nil	406,821
Area under Irrigated Culture .. (acres)	108,000	518,827
Valuation for Rating purposes .. (£)	196,000	723,962
Rural Waterworks Districts—		
Number of Districts administered ..	3	30
Valuation for Rating purposes .. (£)	125,000	1,508,672
Urban Districts—		
Number of Districts administered	1	86
Valuation for Rating purposes .. (£)	5,600	577,377
Coliban System (Urban, Rural, Irrigation and Mining Supplies)—	At 30th June, 1910.	
Valuation for Urban Rating purposes (£)	317,750	389,808
Drainage and Flood Protection Districts—		
Number of Districts administered ..	..	5

An illustration of the influence of closer settlement and the allotment of water rights in extending irrigation is contained in the following table, which shows, for the districts having water rights, the areas irrigated in 1909–10—the year in which these two factors

first operated—and the average areas for the five years ended 30th June, 1937 :—

PROGRESS OF IRRIGATION IN CLOSER SETTLEMENT AREAS.

District (having allotted Water Rights).	Area Irrigated.	
	1909–10.	Average for Five Years ended 30.6.37.
	acres.	acres.
Supplied from the Goulburn—		
Shepparton	..	13,167
South Shepparton	..	3,378
Rodney	32,356	63,865
Stanhope	2,000	12,647
Tongala	3,000	19,281
Rochester	500	49,458
Echuca North	..	4,990
Dingee	..	3,435
Tragowel Plains	20,000	47,691
Supplied from the Werribee—		
Bacchus Marsh	31	3,437
Werribee	..	8,456
Supplied from the Macallister—		
Maffra–Sale	..	12,830
Supplied from the Murray—		
Leitchville	..	6,321
Cohuna	12,000	42,198
*Gannawarra	7,825	..
Koondrook	5,029	27,058
Swan Hill	5,410	20,643
Nyah	569	3,009
Red Cliffs	..	11,279
Merbein	202	7,571
Third Lake	..	2,770
Mystic Park	..	3,372
Fish Point	..	2,419
Total	88,922	369,275

* Subdivided 1.7.35. Now included in Cohuna and Koondrook Districts.

The area under irrigated culture for all kinds of crops in 1936–37 was 518,827 acres, being 22,992 acres more than the area irrigated in the previous year, and 55,124 acres above the average of the previous five years.

Total area irrigated.

The subjoined table shows the total extent of irrigated land in the State in 1909–10 and in each of the five years, 1932–33 to 1936–37, and the purposes for which the land was utilized :—

IRRIGATED AREAS : HOW UTILIZED.

Crop.	1909–10.	1932–33.	1933–34.	1934–35.	1935–36.	1936–37.
	acres.	acres.	acres.	acres.	acres.	acres.
Cereals	23,715	32,492	33,543	63,225	39,835	38,328
Lucerne	24,124	119,682	99,948	95,702	91,267	86,568
Sorghum and other annual fodders ..	8,094	24,810	23,557	25,605	20,776	19,753
Pastures	50,541	210,869	199,929	220,483	252,345	292,001
Vineyards and orchards	17,524	67,451	64,669	66,960	67,319	66,526
Fallow	4,988	8,275	5,096	6,732	6,275	8,093
Miscellaneous ..	785	11,137	8,582	15,519	18,018	7,558
Total ..	129,771	474,716	435,324	494,226	495,835	518,827

NOTE.—8,000 acres, details of which are not available, were irrigated by private diversions in 1909–10, making a total area for that year of 137,771 acres.

Of the total area irrigated in 1936–37—518,827 acres—the percentages devoted to different purposes were as follows :—Pastures, 56 ; lucerne, 17 ; vineyards, orchards, and gardens, 13 ; cereals, 7 ; sorghum and other annual fodder crops, 4 ; fallows and miscellaneous, 3.

Progress in Irrigation Areas, 936-37.

Dairying is one of the principal industries in irrigation districts. Dairy herds from irrigated areas again achieved outstanding success in competitions conducted by Herd Testing Associations, and high awards overseas were also received for dairy products.

The production of dried vine and tree fruits and of citrus and fruits for canning are established features in these districts. There has also been considerable expansion in market gardening and a development of the canning industry in relation thereto. The Victorian dried vine fruit crop amounted to 44,877 tons. The production of citrus fruits in irrigation districts during the 1936–37 season amounted to 668,700 bushels—approximately 88 per cent. of the citrus production of the State.

The Victorian production of canned fruit in the season 1936–37 was approximately 1,722,000 cases, being about 74 per cent. of the number packed in Australia in that season. This figure represents a record production for Victoria and is approximately 13 per cent. greater than for the preceding year.

Supply of water for domestic and stock purposes.

Extensive schemes for the supply of water for domestic and stock purposes are under the control of the State Rivers and Water Supply Commission. Altogether, the area so supplied is approximately 23,539 square miles—about 27 per cent. of the total area of the State. The major portion of the area supplied is in the Mallee and Wimmera districts.

The number of country towns supplied with water for domestic use is—109 by the Commission, 111 by Waterworks Trusts, and 16 by Local Government bodies.

The estimated population in country towns supplied with water is 415,100 persons.

STORAGE AND SUPPLY SCHEMES.

Total Storages in State.

In 1902 the total capacity of storages in the State was 172,000 acre feet. The present capacity is 1,891,350 acre feet. The Hume Reservoir, designed to contain 2,000,000 acre feet (half of which can, subject to the provisions of the River Murray Agreement, be credited to the State of Victoria) now has a capacity of 1,250,000 acre feet. When the final stage of this work has been constructed (involving a further approval of the interested State Governments), and the Yarrawonga Weir, Euston Lock Weir, Glenmaggie, and Bittern Reservoirs are completed, the combined capacities of Victoria's storages will be 2,349,330 acre feet.

EXISTING STORAGES.

	Capacities in Acre Feet.	
Goulburn System—		
Goulburn Weir	20,700	
Waranga	333,400	
Eildon	306,000	
		660,100
Murray-Loddon System—		
Hume Reservoir (part of 2,000,000 acre feet—half share)	625,000	
Torrumbarry (half share of 26,000 acre feet)	13,000	
Mildura (half share of 34,000 acre feet)	17,000	
Wentworth (half share of 20,000 acre feet)	10,000	
Kow Swamp	40,860	
Laanecoorie	6,650	
Kerang North-west Lakes	69,400	
Lake Boga	29,650	
Long Lake	3,820	
		815,380
Wimmera-Mallee System—		
Lake Lonsdale	53,300	
Wartook	23,800	
Fyans Lake	17,100	
Taylors Lake	30,000	
Pine Lake	52,000	
Green Lake	6,600	
Dock Lake	4,800	
Moora	5,100	
Lower Wimmera Weirs	2,870	
Batyo Catyo (Avon Regulator)	5,000	
Lake Whitton	1,300	
Earthen Storages, Township Reservoirs, and Mallee Tanks	5,760	
		207,630
Maffra-Sale System—		
Glenmaggie Reservoir (part of 150,000 acre feet)		104,500
Coliban System—		
Upper Coliban	25,700	
Malmsbury	12,300	
Spring Gully	2,000	
Subsidiary Reservoirs	4,970	
		44,970
Werribee—		
Pykes Creek	21,000	
Melton	19,100	
		40,100
Bellarine Peninsula System—		
Wurdee Boluc	10,000	
Service Basins	660	
		10,660
Mornington Peninsula System—		
Lysterfield Reservoir	3,400	
Beaconsfield, Frankston, and Mornington Reservoirs	1,660	
Service Basins	200	
		5,260
Miscellaneous—		
Wonthaggi	1,550	
Eppalock	1,200	
		2,750
Total capacity of existing Storages		1,891,350

ADDITIONAL STORAGE BEING PROVIDED BY WORKS IN COURSE OF CONSTRUCTION.

	Capacities in Acre Feet.	
Mornington Peninsula System—		
Bittern Reservoir	480	
Murray System—		
Yarrawonga Weir (half share of 50,000 acre feet) ..	25,000	
Euston Loch Weir (half share of 24,000 acre feet) ..	12,000	
		37,480

FURTHER STORAGE WHICH COULD BE PROVIDED BY COMPLETION OF EXISTING WORKS.

Maffra-Sale System—		
Glenmaggie Reservoir (balance of 150,000 acre feet) ..	45,500	
Hume Reservoir, at junction with Mitta River (half-share of balance of 2,000,000 acre feet)	375,000	
		420,500
Total capacity of storages when works are completed ..		2,349,330

Detailed descriptions of the various systems which have been instituted for irrigation and for supplying water for domestic and stock purposes appear in the *Year-Book* for 1928–29 (pp. 526 to 534).

Mildura Irrigation Settlement.

The Mildura Irrigation Settlement, on the River Murray, was established in 1887 under the management of the Chaffey Brothers Limited, and in 1895 the control of the water supply was vested in the First Mildura Irrigation Trust. Water is obtained by pumping from the river. The extent of watering done represented 55,060 acres in 1932–33, 55,477 acres in 1933–34, 58,048 acres in 1934–35, 68,097 acres in 1935–36, and 66,752 acres in 1936–37.

The receipts and payments of the Mildura Irrigation Trust during the year ended 30th June, 1937, were as follows :—

RECEIPTS AND PAYMENTS OF FIRST MILDURA IRRIGATION TRUST, 1936–37.

Receipts.	£	*Payments.*	£
Horticultural Rates ..	36,534	Wages and Salaries ..	19,014
Special Waterings, &c. ..	2,597	Firewood	7,821
Miscellaneous	25,333	Interest, Sinking Fund and Depreciation	5,069
		Redemption of Loans ..	267
		Miscellaneous	33,345
Total	64,464	Total	65,516

METEOROLOGY.

Meteorological Records.

Particulars in regard to climate and weather conditions have been furnished by the Commonwealth Meteorologist, and are given in the following tables. In the first are shown the rainfall for each district and for the whole State for each of the years 1901 to 1936, together with the mean rainfall covering a period of 66 years :—

RAINFALL—YEARLY RECORDS AND AVERAGES.

Year.	Districts.								Whole State.
	Mallee.	Wimmera.	Northern.	North-Central.	North-Eastern.	Western.	Central.	Gippsland.	
	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
1901 ..	9·39	16·61	13·58	24·78	28·08	27·90	28·98	33·66	22·05
1902 ..	7·64	11·94	11·26	18·41	20·10	23·54	24·88	33·35	18·55
1903 ..	16·34	22·76	22·22	32·07	33·13	33·43	32·86	33·68	27·44
1904 ..	10·75	17·22	17·32	28·00	33·56	28·54	31·29	30·02	23·49
1905 ..	12·01	18·40	16·39	25·36	31·72	28·79	29·61	37·84	24·53
1906 ..	15·22	23·42	24·16	32·00	42·11	32·53	30·13	34·81	28·49
1907 ..	9·25	17·07	14·74	22·42	26·19	26·16	25·36	27·20	20·40
1908 ..	12·33	17·72	14·38	19·98	26·40	25·81	20·08	24·29	20·02
1909 ..	14·35	22·38	20·04	29·77	35·62	31·37	30·57	34·09	26·52
1910 ..	15·96	22·36	20·13	29·13	32·10	32·45	28·28	30·80	25·96
1911 ..	17·84	19·89	19·87	29·79	33·24	31·13	36·88	39·71	28·08
1912 ..	12·50	17·52	18·12	23·00	30·93	25·94	24·92	26·60	21·86
1913 ..	12·66	16·38	16·76	24·22	29·69	25·85	27·64	34·65	22·96
1914 ..	7·29	9·76	9·73	14·95	19·94	18·56	20·05	23·81	14·66
1915 ..	12·42	18·98	16·75	25·65	34·17	27·44	24·67	27·63	22·35
1916 ..	17·72	22·54	25·60	34·44	44·01	30·72	38·78	37·78	30·27
1917 ..	19·55	21·96	26·34	35·86	56·09	31·70	32·41	34·63	30·77
1918 ..	13·59	16·44	21·96	28·30	36·96	25·70	30·11	33·39	24·70
1919 ..	11·46	13·86	15·06	21·21	27·27	26·47	25·48	37·03	22·77
1920 ..	14·93	16·04	20·15	28·37	34·42	25·99	31·38	33·37	25·43
1921 ..	16·29	19·99	23·69	31·75	39·57	27·36	31·13	31·73	25·35
1922 ..	10·44	17·15	13·15	20·85	26·10	28·09	27·82	32·92	21·35
1923 ..	15·07	20·21	17·60	27·30	34·80	33·51	30·11	33·88	26·12
1924 ..	16·08	22·17	23·29	34·74	40·70	31·13	40·30	37·37	28·10
1925 ..	9·87	14·20	14·09	20·28	27·42	22·43	23·12	29·69	19·74
1926 ..	12·64	17·00	16·85	24·25	35·36	26·70	24·20	29·72	22·90
1927 ..	7·66	13·93	11·14	18·67	26·15	23·20	22·16	28·43	18·56
1928 ..	14·04	19·10	21·27	29·56	37·21	30·46	29·86	33·98	26·14
1929 ..	9·10	15·56	13·65	24·20	27·24	29·28	31·13	32·36	22·00
1930 ..	15·32	20·94	19·68	30·59	32·49	29·43	30·85	33·66	25·76
1931 ..	14·86	19·25	21·77	31·20	43·18	28·79	32·88	32·65	26·97
1932 ..	14·96	18·90	20·60	29·63	34·33	31·85	32·91	34·19	26·34
1933 ..	14·13	20·96	20·25	31·09	32·09	26·87	27·56	30·65	24·47
1934 ..	13·21	16·64	21·01	28·57	42·81	29·20	35·60	43·39	27·60
1935 ..	10·84	17·71	19·53	29·14	35·86	30·49	34·23	42·53	26·63
1936 ..	14·39	19·41	19·50	28·47	35·52	26·91	30·24	36·38	25·63
Means for 66 years	13·33	18·57	18·74	27·23	33·64	28·28	29·89	34·64	24·80

The wettest portion of the State is the Cape Otway Forest, which is closely followed by the South Gippsland district and the Latrobe and Thomson Basin. The lowest rainfall occurs in the Mallee district, where the average is 13·33 inches per annum, as compared with 24·80 inches for the whole State.

The rainfall recorded in each of the 26 basins or regions of the State for each quarter of 1936 and the quarterly averages up to 1936 deduced from all available records are as follows :—

RAINFALL—QUARTERLY RECORDS AND AVERAGES.

Basin or Region.	First Quarter.		Second Quarter.		Third Quarter.		Fourth Quarter.	
	Amount.	Average.	Amount.	Average.	Amount.	Average.	Amount.	Average.
	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.
Glenelg and Wannon Rivers ..	2·03	3·63	6·30	7·67	9·18	8·99	6·60	5·86
Fitzroy, Eumeralla, and Merri Rivers	1·44	4·32	6·72	8·24	10·03	9·46	7·08	6·23
Hopkins River and Mount Emu Creek	2·07	4·23	6·07	7·12	9·78	7·86	7·09	6·02
Mount Elephant and Lake Corangamite	2·47	4·42	5·82	7·41	10·79	8·36	7·24	6·26
Cape Otway Forest	3·19	6·13	8·81	11·75	17·31	13·17	9·72	8·71
Moorabool and Barwon Rivers	3·32	4·73	5·74	6·51	8·81	6·77	6·95	6·22
Werribee and Saltwater Rivers ..	2·69	5·09	7·10	6·19	7·94	6·19	7·40	6·26
Yarra River and Dandenong Creek	3·86	7·11	10·69	9·00	10·73	9·11	11·02	9·53
Koo-wee-rup Swamp	3·62	6·89	10·74	9·92	11·19	10·03	11·34	9·44
South Gippsland	5·15	7·93	11·40	10·77	12·21	10·92	11·00	9·20
Latrobe and Thomson Rivers ..	4·71	7·30	12·70	9·99	13·04	10·96	12·87	10·41
Macallister and Avon Rivers ..	3·97	6·22	10·70	5·62	5·51	5·63	6·86	6·89
Mitchell River	5·51	6·68	11·14	6·32	5·83	6·46	7·25	7·12
Tambo and Nicholson Rivers ..	7·47	6·89	11·54	6·80	4·94	6·54	7·72	7·58
Snowy River	10·68	8·16	12·23	9·27	5·41	8·87	8·20	8·76
Murray River	2·09	3·17	4·55	4·83	6·92	4·86	4·15	4·01
Mitta Mitta and Kiewa Rivers ..	7·51	6·12	7·42	9·02	12·63	10·38	8·60	8·05
Ovens River	4·92	5·67	8·16	10·04	15·82	11·08	8·77	7·63
Goulburn River..	3·21	4·76	7·03	7·53	9·95	7·98	7·22	6·34
Campaspe River	2·39	4·05	5·15	6·92	10·16	7·11	7·18	5·09
Loddon River	1·89	3·56	5·47	5·93	8·91	6·24	5·58	4·60
Avoca River	1·98	2·83	2·90	5·09	6·93	5·43	4·16	3·82
Avon and Richardson Rivers ..	3·09	2·58	2·88	4·51	6·34	4·96	4·59	3·53
Eastern Wimmera	2·71	2·97	5·78	6·43	9·50	7·04	5·01	4·78
Western Wimmera	2·20	2·50	5·38	6·11	8·28	6·95	5·57	4·35
Mallee	3·06	2·27	2·95	3·55	4·46	3·73	2·73	3·02
Weighted averages of above basins	3·60	4·43	6·70	6·83	8·62	7·30	6·49	5·85

An estimate of the areas of the State, in square miles, subject to different degrees of rainfall is contained in the following statement :—

DISTRIBUTION OF AVERAGE RAINFALL.

Rainfall.	Area.
Inches.	Square Miles.
Under 15	19,270
15 to 20	13,492
20 to 25	14,170
25 to 30	15,579
30 to 40	14,450
40 to 50	7,338
50 to 60	2,980
Over 60	605

The averages of the climatic elements for the seasons in Melbourne deduced from all available official records are given below.

AVERAGES OF CLIMATIC ELEMENTS IN MELBOURNE.

Meteorological Elements.	Spring.	Summer.	Autumn.	Winter.
Mean pressure of air in inches	29·972	29·922	30·080	30·077
Monthly range of pressure of air—Inches	·889	·763	·814	·975
Mean temperature of air in shade—°Fahr.	57·7	66·6	59·4	50·1
Mean daily range of temperature of air in shade—°Fahr.	18·7	21·0	17·4	14·0
Mean relative humidity. Saturation=100	65	60	69	75
Mean rainfall in inches	7·23	6·00	6·63	5·84
Mean number of days of rain	38	25	34	43
Mean amount of spontaneous evaporation in inches	10·22	17·20	7·91	3·72
Mean daily amount of cloudiness—Scale 0 to 10	6·0	5·2	5·9	6·4
Mean number of days of fog	1	1	7	12

In the subjoined statement are shown the yearly averages of the climatic elements in Melbourne for 1936 and for the last 81 years, as well as the extremes between which the yearly average values of such elements have oscillated in the latter period.

YEARLY AVERAGES AND EXTREMES OF CLIMATIC ELEMENTS.

Meteorological Elements.	Yearly Averages and Extremes.			
	Year 1936.	Average for 81 Years.	Extremes between which the Yearly Average Values have oscillated in 81 years.	
			Highest.	Lowest.
Mean atmospheric pressure (inches)..	30·008	30·013	30·106	29·945
Highest „ „ „ ..	30·576	30·605	30·770	30·488
Lowest „ „ „ ..	29·170	29·250	29·495	28·942
Range (inches)	1·406	1·355	1·719	1·074
Mean temperature of air in shade (°Fahr.)	58·8	58·5	59·9	57·3
Mean daily maximum .. (°Fahr.)	68·0	67·3	69·0	65·4
Mean daily minimum .. „	49·6	49·6	51·2	47·2
Absolute maximum .. „	105·7	105·0	111·2	96·6
Absolute minimum .. „	32·8	31·0	34·2	27·0
Mean daily range .. „	18·4	17·7	20·4	15·0
Absolute annual range .. „	72·9	74·0	82·6	66·0
Solar Radiation (mean maxima) „	108·5	117·4	127·6	106·0
Terrestrial Radiation (mean minima) .. .. (°Fahr.)	44·0	43·9	46·8	39·5
Rainfall (in inches)	24·30	25·70	38·04	15·61
Number of wet days	187	140	187	102
Year's amount of free evaporation (in inches)	38·60	39·05	45·66	31·59
Percentage of humidity (saturation =100)	63	67	76	61
Cloudiness (scale 10 = overcast, 0 = clear)	5·9	5·9	6·4	4·8
Number of days of fog	26	21	50	5

AGRICULTURAL RESEARCH AND EDUCATION.

Department of Agriculture. This Department is controlled by a Minister of the Crown, under whom there is a large staff of experts with the Director of Agriculture as permanent head. These officers are actively engaged in supervising all matters relating to the primary industries of the State, and in giving advice to those engaged therein. The Department publishes a monthly journal.

Melbourne University School of Agriculture. Melbourne University has a well-equipped School of Agriculture, for the maintenance of which a special grant is provided by the State. This School affords opportunity for the training of students in science as applied to practical agriculture and kindred industries. A large number of graduates of this school is employed, mostly in the Victorian Department of Agriculture, on field advisory work and laboratory investigations. The course occupies four years. The first is devoted to pure science; during the second the students are in residence at the State Research Farm, Werribee, engaged in practical farming with lectures on preparatory subjects, and the remaining two years are devoted to a more specialized study of agriculture and allied subjects on a scientific basis.

Government Experimental Farms. The Department of Agriculture conducts research and experimental work at the State Research Farm at Werribee, the Mallee Research Station at Walpeup, the Horticultural Research Station at Tatura, the Rutherglen State Farm, the Longerenong Agricultural College, the Dookie Agricultural College, and at the School of Primary Agriculture, Burnley. In addition, there are 114 plots on selected farms throughout the State (including 68 pasture plots conducted in conjunction with the Victorian Pasture Improvement League) on which experiments and demonstrations are conducted.

At the State Research Farm, Werribee, experiments are undertaken for the improvement of wheat and other cereals, grasses, clovers and various economic plants, and investigations made into the methods and problems relating to irrigated agriculture, and the breeding and feeding of dairy cattle, horses, sheep and poultry.

Work at the Rutherglen Farm, which serves as a research station for the North-East, includes various aspects of cereal growing and pasture improvement. It was here that the initial experiments were conducted (1911–1918) which resulted in the widespread adoption of the topdressing of pastures with phosphates. The Mallee Research Station was established in 1932. In addition to cereal and grazing investigations, an important feature of the work at this station is research concerning various grasses with the view of producing a pasture which will thrive under Mallee conditions. At Longerenong and Dookie experiments are conducted on wheat and oat cultivation for Wimmera and north-eastern conditions respectively. At the School of Primary Agriculture, Burnley, a Plant Research Laboratory mainly devoted to plant pathological and entomological research has been established. Research work on the breeding and selection of grasses and clovers is also carried on.

The Horticultural Research Station at Tatura was recently established as a research centre for the purpose of improving varieties of fruits. Officers are now engaged in the study of irrigation and soil fertility in the Goulburn Valley in relation to the production of canning fruits.

The Government experimental plots on selected farms embrace investigations into pasture improvement, grazing trials, and the cultivation of wheat, oats, potatoes, tobacco, maize, broom millet, and vegetables.

The pasture experiments are largely responsible for recent rapid advances made in pasture improvement throughout Victoria. During the season 1936-37, 2,911,181 acres were topdressed and resulted in an estimated increase in carrying capacity of about 50 per cent. above pastures not similarly treated.

Agricultural Colleges. An Act for the establishment of Agricultural Colleges was passed in 1884, and 14,458 acres, comprising 5,955 acres at Dookie, 2,386 acres at Longerenong, 2,500 acres at Gunyah Gunyah, 2,800 acres at Olangolah, and 817 acres at Bullarto, were reserved as sites for colleges and experimental farms. The areas at Dookie and Longerenong are being used for the purpose for which they were reserved, but the other three are devoted to other uses. The fee for students in residence at the agricultural colleges is £50 per annum for maintenance, including stationery and medical and other charges. No charge is made for instruction. Accommodation is provided at Dookie for 100 and at Longerenong for 50 students.

Experimental Farms and Agricultural Colleges. Various particulars relating to the State Experimental Farms and Agricultural Colleges are embodied in the next statement :—

GOVERNMENT EXPERIMENTAL FARMS AND AGRICULTURAL COLLEGES, 1936-37.

Particulars.	Burnley School of Primary Agriculture, &c.	Central Research Farm, Werribee.	Rutherglen.		Mallee Research Station, Walpeup.	Horticultural Research Station, Tatura.	Dookie Agricultural College.	Longerenong Agricultural College.
			State Farm.	Viticultural Station.				
	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.
Area under crop ..	12	1,005	352	106	357	..	881	903
Other arable land ..	15	1,100	459	98	265	102	1,289	1,056
Balance of area ..	6	106	309	29	1,306	2	3,756	427
Total area of farm ..	33	2,211	1,120	233	1,928	104	5,926	2,386
	£	£	£	£	£	£	£	£
Value of produce for year	600	7,791	1,905	458	1,491	..	11,000	9,100
Receipts—								
Government Grant Council of Agricultural Education Contribution	3,149	13,425	1,332	2,298	1,613	1,692	7,364	7,587
Other	1,043	8,064	2,130	168	1,036	..	12,353	7,547
Total receipts ..	4,192	21,489	3,462	2,466	2,649	1,692	19,717	15,134
Total expenditure ..	3,149	13,425	3,166	2,298	1,613	1,692	19,717	15,134
Number of students ..	82	11	..	..	..	..	77	38

Inspection of Orchards, Nurseries, &c.

The orchards, nurseries, and gardens of the State are systematically inspected by officers of the Horticultural Division of the Department of Agriculture.

Advice is given on the control of pests and diseases when detected, and action is taken where necessary to enforce its compliance.

All plant material entering Victoria, whether from other Australian States or overseas, is subject to strict inspection and measures are taken when necessary to either free such material of disease or have it destroyed.

Commonwealth Council of Scientific and Industrial Research.

One of the principal functions of the Council is to initiate and carry out scientific researches in connexion with primary and secondary industries. The main branches of the work of the Council are in relation to plant, soil and entomological problems, animal nutrition and diseases, forest products, food preservation and transport, and fisheries. In addition, facilities are now being made available to the Council to enable it to extend its activities to the field of the secondary industries. In this work, attention will first be given to the establishment of—(i) an Information Section, (ii) a National Standards Laboratory, (iii) an Aeronautical Laboratory (in which engineering research, other than that required by the aeronautical industry could be undertaken), and (iv) the development of laboratories for general secondary industry research.

State Committees have been formed whose main function is to advise the Council as to matters that may affect their respective States.

The headquarters of the Council are located at 314 Albert-street, East Melbourne. Two of the Council's Divisions—the Division of Forest Products and the Division of Animal Health and Nutrition—also have their headquarters in Victoria. Researches into timber seasoning, preservation, identification, mechanics, physics, chemistry, and general utilization are carried out by the former Division. The Victorian work of the Division of Animal Health and Nutrition is concentrated mainly on problems of cattle, e.g., pleuro-pneumonia, mastitis, and bovine haematuria.

At Merbein a station has been established for the purpose of conducting research into the problems associated with the dried vine fruits industry.

FORESTRY.

The State forests are controlled by a Commission of three, which was first appointed in 1919. The State has a wooded area of about 14,000,000 acres, of which 4,814,132 acres are set aside as permanent State forests and timber reserves.

To encourage the growth of softwoods or conifers in both State and private plantations three large nurseries have been established at Creswick, Macedon, and Broadford. The area of coniferous plantations at the end of the 1936 planting season amounted to 45,635 acres. New work was largely confined to those plantations located in the hill zones. In addition to providing trees for the plantations, the nurseries supply considerable numbers of plants at low rates to State schools, public bodies, and private applicants. This has proved of great benefit to the community by fostering an interest in tree planting generally, and especially by encouraging farmers to plant in order to afford protection to their homesteads and to provide shade and shelter for their flocks and herds.

The Forestry Fund was established in 1918 by Act No. 2976, and made applicable only to expenditure on the improvements and reforestation of State forests and the development of forestry. In each year the Treasurer makes a grant to the Fund of £40,000 (reduced to £32,000 under the provisions of the *Financial Emergency Act* 1931) out of the Consolidated Revenue, and also transfers half of the amount in excess of £80,000 received from royalties, leases, licences, and permits.

The revenue derived from forest sources during the financial year 1936-37 was £199,360, and the expenditure £610,604—£350,564 of which was paid out of the Unemployment Relief Fund, £96,391 out of the Consolidated Revenue, £39,959 under the Forests Loan Act No. 4339, £11,336 under Loan Act No. 4248, and the balance—£112,354—from the Forestry Fund.

The output from State Forests and other Crown Lands in 1936-37 was 8,253,000 cubic feet of sawn, 1,529,000 cubic feet of hewn, and 423,000 cubic feet of round timber. In addition, 12,240,000 cubic feet of fuel timber and 1,280,000 cubic feet of miscellaneous timber were produced.

Particulars of sawn timber and firewood, from all sources, will be found on pages 492 and 493 of this volume.

AGRICULTURE.

Progress of cultivation. All divisions of the State are suitable for cultivation. The area cultivated in 1936-37 was 6,890,475 acres, as compared with 6,797,538 acres in the previous season, and an annual average of 7,862,470 acres for the seasons 1931-35, 7,616,031 acres for the seasons 1925-30, 6,446,389 acres for the seasons 1915-25, 5,032,359 acres for the seasons 1905-15, and 3,547,111 acres for the seasons 1895-1905. Notwithstanding the large increase in the area cultivated since 1915, there has been considerable growth in the dairying and pastoral industries.

The following table shows the area under cultivation from period to period during the last 82 years :—

ACREAGE CULTIVATED ANNUALLY, 1855 TO 1937.

Period or Year (ended March).	Annual average area in each quinquennium, 1855 to 1925, and actual area each year 1926–1937, under—		
	Crop.	Fallow.	Total Cultivation.
	acres.	acres.	acres.
1855–65	325,676	12,146	337,822
1865–75	624,377	57,274	681,651
1875-85	1,306,920	137,536	1,444,456
1885–95	2,109,326	364,282	2,473,608
1895–1905	3,022,914	524,197	3,547,111
1905–15	3,756,211	1,276,148	5,032,359
1915 25	4,594,244	1,852,145	6,446,389
1926	4,433,492	2,457,136	6,890,628
1927	4,735,173	2,569,021	7,304,194
1928	4,942,258	2,692,044	7,634,302
1929	5,505,651	2,683,462	8,189,113
1930	5,579,258	2,482,662	8,061,920
1931	6,715,660	2,590,629	9,306,289
1932	5,407,109	2,145,819	7,552,928
1933	5,115,745	2,633,287	7,749,032
1934	5,266,913	2,543,043	7,809,956
1935	4,677,683	2,216,464	6,894,147
1936	4,438,761	2,358,777	6,797,538
1937	4,407,312	2,483,163	6.890,475

The decrease in the area under crop in recent years has been due mainly to the reduced acreage sown to wheat for grain.

Land occupied in different districts.

The following tables give information relating to land occupied in each district during the season 1936-37 :—

LAND IN OCCUPATION IN EACH DISTRICT OF VICTORIA, SEASON 1936-37.

(Areas of 1 acre and upwards.)

Districts.	Total Area of Districts.	Number of Occupiers.	Acres Occupied.				
			For Agricultural Purposes.	For Pasture.		Unproductive.	Total.
				Sown Grasses, Clover, or Lucerne.	Natural Grasses.		
	Acres.						
Central ..	4,065,280	16,678	388,522	396,524	1,734,414	263,147	2,782,607
North-Central	2,929,920	5,139	132,868	44,741	1,921,162	103,871	2,202,642
Western ..	8,775,040	12,124	333,857	1,013,805	5,107,655	462,321	6,917,638
Wimmera ..	7,394,560	6,110	1,891,800	97,829	3,859,254	593,453	6,442,336
Mallee ..	10,784,000	7,189	2,663,920	18,102	3,623,360	314,192	6,619,574
Northern ..	6,337,280	11,365	1,197,531	196,373	3,976,672	85,692	5,456,268
North-Eastern	7,220,480	5,302	121,718	77,197	3,565,141	627,368	4,391,424
Gippsland ..	8,739,200	8,938	160,259	622,316	2,455,954	1,775,420	5,013,949
Total ..	56,245,760	72,845	6,890,475	2,466,887	26,243,612	4,225,464	39,826,438
	PERCENTAGE OF ABOVE TO AREA OCCUPIED.						
Central ..	..	..	13·96	14·25	62·23	9·46	100·00
North-Central	..	..	6·03	2·03	87·22	4·72	100·00
Western ..	..	..	4·83	14·66	73·83	6·68	100·00
Wimmera ..	..	..	29·36	1·52	59·91	9·21	100·00
Mallee ..	..	..	40·24	·27	54·74	4·75	100·00
Northern ..	..	..	21·95	3·60	72·88	1·57	100·00
North-Eastern	..	..	2·77	1·76	81·18	14·29	100·00
Gippsland ..	..	..	3·20	12·41	48·98	35·41	100·00
Total ..	..	..	17·30	6·20	65·89	10·61	100·00
	PERCENTAGE IN EACH DISTRICT OF TOTAL IN STATE.						
Central ..	7·23	22·90	5·64	16·07	6·61	6·23	6·98
North-Central	5·21	7·05	1·93	1·81	7·32	2·46	5·53
Western ..	15·60	16·64	4·84	41·10	19·46	10·94	17·37
Wimmera ..	13·14	8·39	27·46	3·97	14·71	14·03	16·18
Mallee ..	19·17	9·87	38·66	·73	13·81	7·44	16·62
Northern ..	11·27	15·60	17·38	7·96	15·15	2·03	13·70
North-Eastern	12·84	7·28	1·77	3·13	13·58	14·85	11·03
Gippsland ..	15·54	12·27	2·32	25·23	9·36	42·02	12·59
Total ..	100·00	100·00	100·00	100·00	100·00	100·00	100·00

It will be seen from these tables that the proportion of cultivation to land occupied is much larger in the Wimmera, Mallee, and Northern than in other districts. Of the occupied land, 29 per cent. in the Wimmera, 40 per cent. in the Mallee, and 22 per cent. in the Northern districts were used for agriculture in 1936-37. In that year

the area cultivated in these three districts was 83 per cent. of the total cultivation in Victoria. In the North-Central, Western, and North-Eastern districts, the land occupied is largely devoted to grazing. Gippsland, Western, and Central are the chief dairying districts, and these districts contain 82 per cent. of the sown pastures of the State.

Size of holdings and how utilized, 1919, 1925, 1929, and 1934.

To illustrate the uses to which the land was applied in 1919, 1925, 1929, and 1934, various percentages, relating to holdings of different sizes of privately-owned land and Crown land held in conjunction therewith, are given for those years in the succeeding table which also shows the live stock reduced to their equivalent in sheep, carried on the holdings :—

SIZE OF HOLDINGS AND HOW UTILIZED, 1919, 1925, 1929, AND 1934.

Size of Holdings of Privately-owned Land. (In Acres.)	Year.	Percentage in each Division to Total of—					Live Stock Grazed reduced to equivalent in Sheep.	
		Holdings.	Area Occupied.	Area under Cultivation.	Area used for Pasture, &c.	Equivalent in Sheep Grazed.	Total.	Per 100 Acres used for Grazing, &c.
		%	%	%	%	%		
1 and under 50	1919	28·71	1·49	1·92	1·41	3·60	1,274,686	284
	1925	27·92	1·62	1·87	1·56	4·05	1,303,611	287
	1929	26·77	1·28	1·55	1·20	2·96	966,721	276
	1934	25·99	1·41	1·54	1·38	3·32	1,322,414	323
50 and under 100 ..	1919	11·06	1·98	2·55	1·88	3·93	1,392,846	233
	1925	11·64	2·35	2·33	2·36	5·16	1,660,520	241
	1929	11·34	1·89	2·03	1·86	4·50	1,452,634	268
	1934	11·38	1·94	1·98	1·94	4·83	1,927,965	335
100 and under 500 ..	1919	36·11	21·43	24·95	20·83	29·43	10,430,632	157
	1925	36·01	22·54	23·25	22·37	31·94	10,279,013	158
	1929	35·14	20·50	18·35	21·09	30·20	9,860,967	160
	1934	35·77	19·81	18·23	20·22	31·33	12,497,181	208
500 and under 1,000 ..	1919	15·44	26·03	37·92	24·01	20·37	7,218,857	94
	1925	15·84	27·19	40·43	24·03	20·26	6,518,684	93
	1929	16·84	27·21	41·40	23·25	20·50	6,691,162	99
	1934	16·45	26·50	40·90	22·75	20·30	8,097,164	120
1,000 and under 5,000 ..	1919	8·07	35·27	30·47	36·09	29·07	10,302,594	90
	1925	8·12	36·10	30·57	37·41	28·30	9,108,435	84
	1929	9·37	38·58	35·07	39·56	30·93	10,096,032	87
	1934	9·88	39·64	35·94	40·60	30·14	12,025,865	100
5,000 and under 10,000 ..	1919	·40	6·38	1·53	7·21	6·29	2,230,338	97
	1925	·34	5·73	1·30	6·79	5·56	1,789,811	91
	1929	·40	6·04	1·20	7·39	6·32	2,064,255	96
	1934	·40	5·99	1·10	7·26	5·67	2,262,059	105
10,000 and under 20,000 ..	1919	·16	4·45	·51	5·12	4·93	1,747,370	107
	1925	·11	3·53	·24	4·32	3·74	1,201,688	96
	1929	·12	3·45	·35	4·31	3·20	1,046,067	83
	1934	·11	2·99	·26	3·70	2·85	1,138,940	103
20,000 and upwards ..	1919	·05	2·97	·15	3·45	2·38	843,378	77
	1925	·02	·84	·01	1·16	·99	317,652	94
	1929	·02	1·05	·05	1·34	1·44	469,930	121
	1934	·02	1·72	·05	2·15	1·56	622,381	97
Total	1919	100·00	100·00	100·00	100·00	100·00	35,440,701	111
	1925						32,179,414	110
	1929						32,647,768	112
	1934						39,893,969	134

In the above table horses and cattle have been reduced to an equivalent in sheep on the assumption that one head of either will

eat as much as ten sheep. On this basis every 100 acres under pasture was carrying the equivalent of 134 sheep in 1934, as compared with 112 in 1929, 110 in 1925, and 111 in 1919.

Dairying is carried on principally on small holdings and, in conjunction therewith, pig farming is often practised as a profitable sideline. In 1934, 74 per cent. of the dairy cows and 76 per cent. of the pigs were on holdings of less than 500 acres.

Size of holdings, showing areas cultivated and grazed.

Information relating to land occupied and cultivation thereon was collected in March, 1934. The land privately owned was summarized according to different sized holdings and, where Crown lands were held in conjunction therewith, these lands were, regardless of size, scheduled with the holdings to which they were attached. The particulars relating to these holdings are given in the following table :—

SIZE OF HOLDINGS SHOWING AREAS UNDER CULTIVATION AND PASTURE, MARCH, 1934.

Size of Holdings. (In Acres.)	Privately-owned Land.			Crown Land held in conjunction with that privately owned.	Total Area Occupied.	Area under—	
	Number of Holdings.	Area Occupied.	Average Size of Holding.			Cultivation.	Pasture, &c.
		acres.	acres.	acres.	acres.	acres.	acres.
1 and under 50 ..	19,348	374,948	19	153,033	527,981	119,076	408,905
50 and under 100 ..	8,475	610,113	72	118,175	728,288	153,217	575,071
100 and under 500 ..	26,635	6,499,014	244	922,428	7,421,442	1,408,012	6,013,430
500 and under 1,000	12,245	8,680,358	709	1,244,542	9,924,900	3,159,356	6,765,544
1,000 and under 5,000	7,357	12,524,655	1,702	2,323,211	14,847,866	2,775,863	12,072,003
5,000 and under 10,000	298	2,013,454	6,757	230,549	2,244,003	84,681	2,159,322
10,000 and under 20,000	81	1,105,170	13,644	16,609	1,121,779	20,390	1,101,389
20,000 and upwards ..	16	456,843	28,553	187,103	643,946	3,660	640,286
Total Privately-owned Land ..	74,455	32,264,555	433	5,195,650	37,460,205	7,724,255	29,735,950
Crown Land not held in conjunction with that privately owned ..	931	..	..	1,317,813	1,317,813	85,701	1,232,112
Grand Total ..	75,386	32,264,555	..	6,513,463	38,778,018	7,809,956	30,968,062

Size of holdings in 1919, 1925, 1929, and 1934.

Particulars of the size of holdings and cultivation thereon, together with the particulars of the total holdings in which only Crown land was held, are given in the following table :—

SIZE OF HOLDINGS AND CULTIVATION THEREON, 1919, 1925, 1929, AND 1934.

Size of Holdings. (In Acres.)	Year.	Privately-owned Land. Number of Holdings.	Privately-owned Land. Area Occupied.	Crown Land held in conjunction with that privately owned.	Total Area Occupied.	Area under— Cultivation.	Area under— Pasture, &c.
			acres.	acres.	acres.	acres.	acres.
1 and under 50	1919	20,866	370,426	182,886	553,312	103,927	449,385
	1925	22,083	405,655	178,977	584,632	129,732	454,900
	1929	19,791	374,677	102,430	477,107	126,435	350,672
	1934	19,348	374,948	153,033	527,981	119,076	408,905
50 and under 100	1919	8,036	572,349	164,491	736,840	137,867	598,973
	1925	9,206	658,278	191,047	849,325	161,488	687,837
	1929	8,388	601,533	105,603	707,136	165,172	541,964
	1934	8,475	610,113	118,175	728,288	153,217	575,071
100 and under 500	1919	26,246	6,517,118	1,463,007	7,980,125	1,350,635	6,629,490
	1925	28,482	6,977,490	1,153,583	8,131,073	1,613,388	6,517,685
	1929	25,979	6,384,766	1,270,651	7,655,417	1,497,695	6,157,722
	1934	26,635	6,499,014	922,428	7,421,442	1,408,012	6,013,430
500 and under 1,000	1919	11,224	7,763,815	1,928,678	9,692,493	2,053,142	7,639,351
	1925	12,534	8,774,932	1,033,245	9,808,177	2,805,966	7,002,211
	1929	12,449	8,828,038	1,336,491	10,164,529	3,377,341	6,787,188
	1934	12,245	8,680,358	1,244,542	9,924,900	3,159,356	6,765,544
1,000 and under 5,000	1919	5,865	10,117,530	3,016,710	13,134,240	1,649,673	11,484,567
	1925	6,420	10,933,319	2,086,875	13,020,194	2,121,423	10,898,771
	1929	6,929	11,858,819	2,550,602	14,409,421	2,860,939	11,548,482
	1934	7,357	12,524,655	2,323,211	14,847,866	2,775,863	12,072,003
5,000 and under 10,000	1919	290	1,996,606	378,877	2,375,483	83,014	2,292,469
	1925	273	1,868,708	198,969	2,067,677	90,274	1,977,403
	1929	297	2,047,281	207,774	2,255,055	97,542	2,157,513
	1934	298	2,013,454	230,549	2,244,003	84,681	2,159,322
10,000 and under 20,000	1919	117	1,621,460	33,603	1,655,063	27,575	1,627,488
	1925	91	1,240,151	33,452	1,273,603	16,610	1,256,993
	1929	90	1,196,469	90,838	1,287,307	28,915	1,258,392
	1934	81	1,105,170	16,609	1,121,779	20,390	1,101,389
20,000 and upwards	1919	35	1,016,847	90,442	1,107,289	8,404	1,098,885
	1925	13	336,791	1,417	338,208	1,033	337,175
	1929	15	390,876	2,519	393,395	3,788	389,607
	1934	16	456,843	187,103	643,946	3,660	640,286
Total of privately-owned land	1919	72,679	29,976,151	7,258,694	37,234,845	5,414,237	31,820,608
	1925	79,102	31,195,324	4,877,565	36,072,889	6,939,914	29,132,975
	1929	73,938	31,682,459	5,666,908	37,349,367	8,157,827	29,191,540
	1934	74,455	32,264,555	5,195,650	37,460,205	7,724,255	29,735,950
Crown Land not held in conjunction with that privately-owned	1919	1,651	..	899,289	899,289	76,783	822,506
	1925	935	..	733,355	733,355	36,800	696,555
	1929	974	..	1,021,435	1,021,435	159,575	861,860
	1934	931	..	1,317,813	1,317,813	85,701	1,232,112
Grand Total	1919	74,330	29,976,151	8,157,983	38,134,134	5,491,020	32,643,114
	1925	80,037	31,195,324	5,610,920	36,806,244	6,976,714	29,829,530
	1929	74,912	31,682,459	6,688,343	38,370,802	8,317,402	30,053,400
	1934	75,386	32,264,555	6,513,463	38,778,018	7,809,956	30,968,062

The number of holdings of privately-owned land of over 10,000 acres was 97 in 1934, 105 in 1929, 104 in 1925, 152 in 1919, 151 in 1913, 175 in 1910, and 195 in 1906, and the aggregate areas comprised therein in the corresponding years were 1,562,013 acres, 1,587,345 acres, 1,576,942 acres, 2,638,307 acres, 2,652,966 acres, 3,298,227 acres, and 4,134,067 acres. The reduction in the period of twenty-eight years between 1906 and 1934 was equivalent to 50 per cent. in the number, and 62 per cent. in the acreage of such estates. Most of this reduction took place between the years 1906 and 1913, and 1919 and 1925.

Principal Crops (Area, Production, and Average Yield).

The principal crops grown in the State are wheat, oats, barley, potatoes, and hay. The following table shows, in respect of these products, the annual average area, production, and yield per acre during each decennium, 1855 to 1925, and the actual area, production and yield per acre for each of the twelve seasons, 1926–1937.

ACREAGE, PRODUCTION, AND AVERAGE YIELD OF FIVE PRINCIPAL CROPS, 1855 TO 1937.

Period or Year (ended March).	Wheat.*	Oats.*	Barley.*	Potatoes.	Hay.
	Annual Area.				
	acres.	acres.	acres.	acres.	acres.
1855–65 ..	119,001	83,296	4,843	24,123	80,117
1865–75 ..	278,077	129,384	19,262	36,744	117,393
1875–85 ..	776,031	147,343	41,188	39,089	226,775
1885–95 ..	1,236,501	210,901	64,310	48,009	437,087
1895–1905 ..	1,898,280	340,957	52,829	45,243	540,472
1905–15 ..	2,190,336	390,642	60,378	56,272	848,587
1915–25 ..	2,633,945	428,372	84,205	61,195	1,122,978
1926 ..	2,513,494	437,696	103,395	63,369	1,013,613
1927 ..	2,915,315	303,424	88,896	66,185	1,080,993
1928 ..	3,064,172	529,392	76,768	77,649	908,804
1929 ..	3,718,904	347,021	75,451	68,412	1,005,063
1930 ..	3,566,135	630,234	97,678	58,789	865,015
1931 ..	4,600,200	371,024	87,518	67,590	1,277,398
1932 ..	3,565,872	439,626	66,381	69,929	955,839
1933 ..	3,230,955	368,846	93,555	69,783	1,044,523
1934 ..	3,052,931	525,976	106,339	60,856	1,196,259
1935 ..	2,458,583	506,638	87,599	54,214	1,261,552
1936 ..	2,323,753	505,623	116,371	44,287	1,140,361
1937 ..	2,393,827	381,069	100,003	45,627	1,181,612

* For Grain.

Acreage, Production, and Average Yield of Five Principal Crops, 1855 to 1937—*continued.*

Period of Year (ended March).	Wheat.*	Oats.*	Barley.*	Potatoes.	Hay.
	Annual Production.				
	bushels.	bushels.	bushels.	tons.	tons.
1855–65 ..	2,198,874	2,068,648	103,575	62,723	111,806
1865–75 ..	4,385,814	2,636,747	390,337	111,800	153,852
1875–85 ..	8,593,308	3,297,468	799,938	135,614	276,771
1885–95 ..	12,268,905	4,649,393	1,187,007	170,905	547,092
1895–1905 ..	14,032,145	6,649,453	947,580	134,357	672,982
1905–15 ..	22,906,743	7,342,468	1,243,442	158,445	1,084,726
1915–25 ..	39,171,358	7,965,864	1,923,654	169,864	1,511,298
1926 ..	29,255,534	4,998,165	1,774,963	160,729	929,068
1927 ..	46,886,020	4,884,006	1,920,722	162,909	1,387,971
1928 ..	26,160,814	4,682,724	1,552,109	230,348	1,001,251
1929 ..	46,818,833	5,602,409	1,556,118	140,158	1,267,437
1930 ..	25,412,587	5,058,541	2,183,325	171,747	963,089
1931 ..	53,814,369	6,893,827	1,983,130	173,341	1,605,900
1932 ..	41,955,856	6,450,281	1,256,678	206,489	1,069,276
1933 ..	47,843,129	6,363,853	1,995,446	182,471	1,386,028
1934 ..	42,613,106	6,778,754	1,888,981	142,132	1,353,796
1935 ..	25,850,528	5,248,787	1,609,518	109,329	1,464,264
1936 ..	37,552,062	6,365,056	2,314,427	104,125	1,346,953
1937 ..	42,844,816	6,107,885	2,143,109	196,623	1,403,049
	Average Annual Yield per Acre.				
	bushels.	bushels.	bushels.	tons.	tons.
1855–65 ..	18·48	24·83	21·39	2·60	1·40
1865–75 ..	15·77	20·38	20·27	3·04	1·31
1875–85 ..	11·07	22·38	19·42	3·47	1·22
1885–95 ..	9·92	22·05	18·46	3·56	1·21
1895–1905 ..	7·39	19·50	17·94	2·97	1·25
1905–15 ..	10·46	18·79	20·59	2·82	1·28
1915–25 ..	14·87	18·60	22·84	2·78	1·35
1926 ..	11·64	11·42	17·17	2·54	0·92
1927 ..	16·08	16·10	21·61	2·46	1·29
1928 ..	8·54	8·85	20·22	2·97	1·10
1929 ..	12·59	16·14	20·62	2·05	1·26
1930 ..	7·13	8·03	22·35	2·92	1·11
1931 ..	11·70	18·58	22·66	2·56	1·26
1932 ..	11·77	14·67	18·93	2·95	1·12
1933 ..	14·81	17·25	21·33	2·61	1·33
1934 ..	13·96	12·89	17·76	2·34	1·13
1935 ..	10·51	10·36	18·37	2·02	1·16
1936 ..	16·16	12·59	19·89	2·35	1·18
1937 ..	17·90	16·03	21·43	4·31	1·19

* For grain.

Area Cultivated 1936–37. A summary of the area under cultivation in each County

AREA UNDER CULTIVATION

Districts and Counties.	Grain Crops.					Potatoes.	Onions.	Hay (Wheaten, Oaten, Lucerne, Grass, etc.).
	Wheat.	Oats.	Barley.	Maize.	Peas.			
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Central District—								
Bourke	5,883	7,683	3,798	2	599	4,437	552	58,406
Grant	12,701	7,055	19,033	24	2,106	7,789	919	50,700
Mornington ..	846	309	221	2,232	194	5,721	214	37,107
Evelyn	58	60	94	2	13	1,700	..	6,536
North-Central District—								
Anglesey ..	892	126	64	35	90	474	..	5,329
Dalhousie ..	1,408	1,555	61	2	82	3,144	..	12,080
Talbot	14,913	7,179	1,493	..	661	7,260	..	41,509
Western District—								
Grenville ..	5,050	5,456	2,577	..	460	718	1,459	25,744
Polwarth ..	64	596	646	..	164	1,278	996	16,407
Heytesbury ..	..	41	58	..	29	250	6	15,122
Hampden ..	4,247	4,737	1,196	..	70	180	140	21,213
Ripon	15,015	15,209	751	..	10	810	..	21,911
Villiers	395	3,667	1,004	..	103	4,238	1,215	22,860
Normanby ..	745	2,209	1,143	..	290	574	3	22,066
Dundas	1,502	5,782	368	..	172	66	..	18,883
Follett	204	733	98	..	3	91	1	3,147
Wimmera District—								
Lowan	188,189	28,925	8,792	..	..	..	..	67,226
Borung	447,352	22,719	12,403	10	61	97	..	104,834
Kara Kara ..	120,718	22,490	794	..	..	26	..	34,009
Mallee District—								
Millewa	108,157	8,977	..	..	..	..	..	25,160
Weeah	156,334	20,346	5,472	..	..	..	..	40,049
Karkarooc ..	547,534	65,272	10,680	..	..	..	..	148,261
Tatchera ..	310,487	59,663	1,579	192	6	6	2	79,060
Northern District—								
Gunbower ..	16,274	4,753	5,641	10	..	9	..	22,512
Gladstone ..	83,442	28,537	2,776	..	..	11	..	28,441
Bendigo	77,904	13,740	2,289	7	18	34	..	37,425
Rodney	49,942	11,562	5,792	9	..	3	1	35,663
Moira	198,199	25,066	1,726	18	19	12	..	55,452
North-Eastern District—								
Delatite	2,388	2,110	345	1,128	77	997	..	20,488
Bogong	19,220	3,277	438	958	58	377	2	21,807
Benambra ..	189	209	151	253	39	24	..	5,631
Wonnangatta ..	..	..	1	76	30	8	..	389
Gippsland District—								
Croajingolong ..	..	43	4	2,480	426	75	..	790
Tambo	5	82	74	3,103	169	112	..	1,361
Dargo	78	82	372	4,224	82	92	2	1,837
Tanjil	3,129	726	7,283	5,190	177	236	1	18,266
Buln Buln ..	363	83	786	160	429	4,778	456	53,931
Total ..	2,393,827	381,069	100,003	20,115	6,637	45,627	5,969	1,181,612

of the State for the season 1936–37 is given in the following table :—

FOR THE SEASON 1936–37.

Green Forage.	Grass and Clover for Seed.	Tobacco.	Vines.	Flax.	Market Gardens.	Orchards.	All Other Crops.	Total Area under Crops.	Land in Fallow.	Total Area under Cultivation.
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
6,414	9	..	..	..	6,949	11,913	1,305	107,950	28,313	136,263
3,839	9	..	20	37	2,147	1,647	278	108,304	31,513	139,817
16,214	146	..	..	37	3,682	14,544	1,518	82,985	6,430	89,415
1,637	..	..	51	..	1,661	9,344	311	21,467	1,560	23,027
1,054	..	..	..	..	73	59	18	8,214	1,168	9,382
1,328	401	..	40	61	10	74	103	20,349	748	21,097
2,637	2,978	..	30	78	21	3,678	96	82,533	19,856	102,389
405	429	..	1	7	11	418	39	42,774	12,607	55,381
2,240	1,654	..	..	136	173	319	120	24,793	657	25,450
1,235	12	..	..	..	9	121	91	16,974	1,453	18,427
866	490	..	..	..	64	48	29	33,280	6,732	40,012
473	15	2	23	33	10	53	10	54,325	26,553	80,878
1,417	383	..	..	..	106	29	284	35,701	2,728	38,429
2,995	30	..	..	..	262	991	242	31,550	4,029	35,579
673	2,052	..	..	6	38	22	102	29,666	5,237	34,903
166	62	4	..	..	14	71	4	4,598	200	4,798
118	21	2	30	..	9	370	242	293,934	207,124	501,058
1,229	..	432	839	..	249	2,120	866	593,211	479,635	1,072,846
170	..	..	53	..	4	517	..	178,781	139,115	317,896
2	..	..	..	..	9	28	10	142,343	70,409	212,752
1,820	..	..	..	..	..	..	102	224,123	154,373	378,496
1,386	..	..	28,357	..	94	2,072	40	803,696	504,624	1,308,320
2,664	77	..	6,370	..	101	1,581	158	461,946	302,406	764,352
7,713	86	85	89	..	241	923	440	58,776	21,099	79,875
336	..	..	21	..	36	388	..	143,988	99,904	243,892
1,657	171	6	113	..	993	2,892	31	137,280	90,392	227,672
2,304	30	7	370	..	265	10,523	18	116,489	50,831	167,320
1,931	12	360	806	..	662	8,671	188	293,122	185,650	478,772
3,444	135	2,217	34	30	32	611	920	34,956	3,134	38,090
2,564	..	2,370	4,648	111	157	1,327	1,050	58,364	15,955	74,319
1,709	..	..	..	76	..	58	158	8,497	225	8,722
63	..	..	..	..	1	7	8	583	4	587
435	..	..	..	..	42	30	548	4,873	53	4,926
696	..	..	..	..	781	122	535	7,040	460	7,500
1,611	..	..	..	..	937	165	476	9,958	234	10,192
8,355	2	5	..	18	449	243	3,970	48,050	2,792	50,842
18,944	202	2	..	297	498	781	129	81,839	4,960	86,799
102,744	9,406	5,492	41,895	927	20,790	76,760	14,439	4,407,312	2,483,163	6,890,475

Area, Yield and Gross Value of Crops, Season 1936-37.

The following table shows the area under, the yield from, and the gross value of each of the principal crops in Victoria for the season 1936–37.

AREA, YIELD, AND GROSS VALUE OF CROPS, 1936–37.

Crop.	Area.	Yield.	Gross Value.*
	acres.		£
Wheat	2,393,827	42,844,816 bushels	11,693,065
Oats	381,069	6,107,885 ,,	814,385
Barley, Malting	83,802	1,782,931 ,,	382,587
,, Other	16,201	360,178 ,,	68,284
Maize	20,115	794,506 ,,	216,764
Rye	1,185	10,388 ,,	3,376
Hay, Wheaten	72,837	88,070 tons	257,703
,, Oaten	940,058	1,069,358 ,,	3,075,765
,, Lucerne, etc.	36,737	56,482 ,,	219,063
,, Other (Grass)	131,980	189,139 ,,	450,370
Straw	..	22,225 ,,	40,655
Grass Seed	9,406	108,791 bushels	48,956
Canary Seed	1,314	7,012 ,,	7,012
Beans for grain	1,143	14,128 ,,	29,917
Peas for grain	6,637	151,608 ,,	44,851
Green Fodder	102,744	.. ..	285,117
Potatoes	45,627	196,623 tons	614,447
Onions	5,969	46,130 ,,	184,099
Sugar Beet	3,475	31,079 ,, of beet valued at factory at £65,266 (Sugar extracted amounted to 4,180 tons)	65,266
Turnips, Beet, etc., for fodder	562	3,942 ,,	18,872
Mangolds	758	8,775 ,,	17,989
Tobacco	5,492	15,658 cwt.	138,965
Hops	142	2,450 ,,	26,295
Broom Millet	1,250	6,577 ,, fibre 6,404 ,, seed	15,703 2,321
Chicory	492	625 tons (dried)	16,252
Flax	927	952 ,, of straw valued at mills at £4,760. Products obtained were— 2,130 cwt. seed 848 cwt. fibre 1,725 cwt. tow	4,760
Orchards, Productive	63,156	.. ..	1,811,845
,, Unproductive	13,604	.. ..	..
Grapes, Table	1,479	3,754 tons	56,304
,, Wine	6,646	12,129 ,, valued at winery at £74,641 (Wine made amounted to 1,818,917 gallons)	74,641
,, Drying	30,204	179,288 ,, producing— 32,755 tons of Sultanas 4,512 tons of Raisins 7,610 tons of Currants	1,463,674 205,131 271,589
Vines, Unproductive	3,566	.. ..	..
Market Gardens	20,790	.. ..	1,143,450
Pumpkins	1,469	6,754 tons	23,639
Other Crops	2,649	.. ..	245,012
Total Crops	4,407,312		24,038,124

* The gross value is based on the wholesale price realized in the principal markets. The places where primary products are absorbed locally or where they become raw material for a secondary industry are presumed to be the principal markets.

Values of five principal crops.

The following table gives the annual value of each of the five principal crops, based upon prices realized at country railway stations, also the value of each crop per acre for each of the five seasons, 1932–33 to 1936–37.

VALUES OF FIVE PRINCIPAL CROPS.

Season.	Annual Value of—				
	Wheat.	Oats.	Barley.	Potatoes.	Hay.
	£	£	£	£	£
1932–33	5,961,983	503,805	208,267	616,028	2,841,357
1933–34	5,708,281	649,631	203,706	591,186	3,192,702
1934–35	4,422,091	524,879	200,927	711,263	3,145,257
1935–36	6,975,305	609,985	281,591	616,326	2,963,105
1936–37	10,573,533	725,311	412,188	533,350	3,712,145

	Annual Value Per Acre of—				
	Wheat.	Oats.	Barley.	Potatoes.	Hay.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1932–33	1 16 11	1 7 4	2 4 6	8 16 7	2 14 5
1933–34	1 17 5	1 4 8	1 18 4	9 14 4	2 13 5
1934–35	1 16 0	1 0 9	2 5 11	13 2 5	2 9 10
1935–36	3 0 0	1 4 2	2 8 5	13 18 4	2 12 0
1936–37	4 8 4	1 18 1	4 2 5	11 13 9	3 2 10

The total value of the five principal crops at country railway stations was £15,956,527 in 1936–37, £11,446,312 in 1935–36, £9,004,417 in 1934–35, £10,345,506 in 1933–34, and £10,131,440 in 1932–33.

Wheat growing in counties.

The principal wheat growing areas are the Wimmera, Mallee, and Northern districts. In the season 1936–37 these districts produced nearly 96 per cent. of the total wheat production of the State. Although other districts provide only small proportions of the total area, they are not to be regarded as unsuitable for wheat growing, as their average yield per acre is usually greater than in the areas mentioned. The low yield in 1934–35 was due in part to the reduction in the area sown, but

mainly to the unfavorable weather conditions and plague of grasshoppers during the growing period of the crop. The yield in 1936–37 was 42,844,816 bushels, which was 5,292,754 bushels more than that of 1935–36. The average yield of 17·9 bushels per acre for the season was the highest recorded since the year 1869–70. The area sown and the production of wheat for grain in different counties for each of the three seasons, 1935–1937, are shown in the following table :—

WHEAT AREAS AND YIELDS IN COUNTIES FOR THE THREE SEASONS, 1935–1937.

Districts and Counties.	Year ended March.								
	Area.			Produce.			Average per Acre.		
	1935.	1936.	1937.	1935.	1936.	1937.	1935.	1936.	1937.
	acres.	acres.	acres.	bushels.	bushels.	bushels.	bush.	bush.	bush.
Central—									
Bourke ..	4,604	3,632	5,883	73,051	55,040	111,301	15·87	15·15	18·92
Grant ..	12,624	9,229	12,701	175,519	159,016	243,416	13·90	17·23	19·17
Mornington ..	1,004	231	846	6,708	3,586	17,286	6·68	15·52	20·43
Evelyn ..	43	31	58	717	765	1,505	16·67	24·68	25·95
Total ..	18,275	13,123	19,488	255,995	218,407	373,508	14·01	16·64	19·17
North-Central—									
Anglesey ..	653	652	892	8,714	13,608	11,950	13·35	20·87	13·40
Dalhousie ..	874	719	1,408	11,794	12,044	28,806	13·49	16·75	20·46
Talbot ..	11,929	12,571	14,913	215,064	287,138	302,288	18·03	22·84	20·27
Total ..	13,456	13,942	17,213	235,572	312,790	343,044	17·51	22·44	19·93
Western—									
Grenville ..	6,216	4,527	5,050	82,798	73,544	97,223	13·32	16·25	19·25
Polwarth ..	163	19	64	2,029	484	1,740	12·45	25·47	27·19
Heytesbury	25	..	..	177	..	..	7·08	..	..
Hampden ..	5,471	4,947	4,247	81,544	93,400	109,251	14·91	18·88	25·72
Ripon ..	20,106	15,937	15,015	382,721	332,521	372,566	19·04	20·86	24·81
Villiers ..	750	602	395	12,119	10,401	8,145	16·16	17·28	20·62
Normanby ..	700	308	745	13,195	4,403	16,034	18·85	14·30	21·52
Dundas ..	1,461	1,166	1,502	28,816	17,724	32,782	19·72	15·20	21·83
Follett ..	139	170	204	2,165	2,203	3,242	15·58	12·96	15·89
Total ..	35,031	27,676	27,222	605,564	534,680	640,983	17·29	19·32	23·55
Wimmera—									
Lowan ..	183,331	175,227	188,189	2,813,952	3,524,744	4,141,453	15·35	20·12	22·01
Borung ..	420,691	411,885	447,352	7,403,936	9,590,835	10,918,772	17·60	23·29	24·41
Kara Kara	116,815	114,462	120,718	1,814,442	2,870,314	2,793,668	15·53	25·08	23·14
Total ..	720,837	701,574	756,259	12,032,330	15,985,893	17,853,893	16·69	22·79	23·61
Mallee—									
Millewa ..	126,617	122,556	108,157	155,545	395,438	778,783	1·23	3·23	7·20
Weeah ..	164,128	159,436	156,334	1,070,059	1,598,715	1,731,578	6·52	10·03	11·08
Karkarooc ..	582,000	550,422	547,534	3,343,563	5,313,687	7,260,385	5·75	9·65	13·26
Tatchera ..	327,088	293,560	310,487	2,098,252	3,637,052	4,794,018	6·42	12·39	15·44
Total ..	1,199,833	1,125,974	1,122,512	6,667,419	10,944,892	14,564,764	5·56	9·72	12·98

WHEAT AREAS AND YIELDS IN COUNTIES FOR THE THREE SEASONS, 1935–1937—*continued.*

Districts and Counties.	Year ended March.								
	Area.			Produce.			Average per Acre.		
	1935.	1936.	1937.	1935.	1936.	1937.	1935.	1936.	1937.
	acres.	acres.	acres.	bushels.	bushels.	bushels.	bush.	bush.	bush.
Northern—									
Gunbower ..	17,260	14,355	16,274	148,279	250,427	266,391	8·59	17·45	16·37
Gladstone ..	81,825	77,731	83,442	986,952	1,733,007	1,601,750	12·06	22·29	19·20
Bendigo ..	76,709	70,683	77,904	812,834	1,402,560	1,486,805	10·60	19·84	19·09
Rodney ..	49,368	46,861	49,942	628,969	1,001,452	1,086,309	12·74	21·37	21·75
Moira ..	216,205	205,090	198,199	3,089,131	4,649,829	4,156,295	14·29	22·67	20·97
Total ..	441,367	414,720	425,761	5,666,165	9,037,275	8,597,550	12·84	21·79	20·19
North-Eastern—									
Delatite ..	2,761	2,879	2,388	31,780	53,051	46,769	11·51	18·43	19·59
Bogong ..	19,899	20,442	19,220	264,541	405,783	360,456	13·29	19·85	18·75
Benambra ..	191	172	189	2,688	2,993	3,182	14·07	17·40	16·84
Wonnangatta	..	..	..	..	..	..	..	..	..
Total ..	22,851	23,493	21,797	299,009	461,827	410,407	13·09	19·66	18·83
Gippsland—									
Croajingolong	5	3	..	83	46	..	16·42	15·33	..
Tambo ..	86	96	5	1,012	973	90	11·77	10·14	18·00
Dargo ..	173	87	78	2,749	1,646	747	15·89	18·92	9·58
Tanjil ..	6,332	2,894	3,129	79,845	50,787	54,096	12·61	17·55	17·29
Buln Buln ..	337	171	363	4,785	2,846	5,734	14·20	16·64	15·80
Total ..	6,933	3,251	3,575	88,474	56,298	60,667	12·76	17·32	16·97
Total (State)	2,458,583	2,323,753	2,393,827	25,850,528	37,552,062	42,844,816	10·51	16·16	17·90

The production of wheat in the other Australian States in 1936–37 was as follows :—New South Wales, 55,668,000 bushels ; South Australia, 28,715,000 bushels ; Western Australia, 21,549,000 bushels ; Queensland, 2,016,000 bushels ; and Tasmania, 571,000 bushels. The total production for the Commonwealth was 151,390,000 bushels.

Monthly Rainfall and Average Yields of Wheat 1927 to 1937. In the following table the average yield per acre in each of the main wheat growing counties for the years 1927 to 1937 is shown in conjunction with the approximate mean rainfall recorded each month. The rainfall during the growing season is also shown separately to indicate its effect on wheat production. While the table is useful as a general reference in respect of the relationship of wheat yields to rainfall, it should be remembered that temperatures, winds, and other factors such as the extent to which fallowing, rotational cropping, and fertilizing is practised have also considerable effect on average yields, as do also the varieties of wheat used.

RAINFALL AND AVERAGE WHEAT YIELD PER ACRE IN WHEAT-GROWING COUNTIES FOR THE YEARS 1927 TO 1937.

County and Year.	Approximate Mean Rainfall each Month.												Total for Year.	Total Wheat-growing Period.	Average Wheat Yield per Acre.
	Jan.	Feb.	Mar.	April.	May.	Wheat-growing Months.						Dec.			
						June.	July.	Aug.	Sept.	Oct.	Nov.				
	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Bushels.
Lowan—															
1927	32	80	72	8	246	106	213	356	87	46	122	108	1,476	930	15·68
1928	152	279	89	170	164	199	216	51	228	361	47	16	1,972	1,102	20·40
1929	89	70	89	179	131	271	172	175	140	115	61	262	1,754	934	18·27
1930	1	117	20	139	98	31	303	294	218	253	147	462	2,083	1,246	19·16
1931	44	4	94	222	256	364	226	233	167	25	79	29	1,743	1,094	16·15
1932	1	263	186	248	105	258	232	232	126	146	58	83	1,938	1,052	17·59
1933	137	2	82	135	367	104	92	194	286	82	337	225	2,043	1,095	17·01
1934	36	37	39	203	5	79	149	190	229	362	267	38	1,634	1,276	15·35
1935	64	10	167	129	158	232	288	237	239	92	97	72	1,785	1,185	20·12
1936	161	11	68	42	157	287	401	260	98	220	34	265	2,004	1,300	22·01
1937	226	87	114	55	155	93	107	256	205	152	43	247	1,740	856	23·92
Borung—															
1927	23	55	46	10	183	107	211	255	89	105	66	108	1,258	833	11·48
1928	198	373	245	114	107	202	148	27	183	298	16	17	1,928	874	18·16
1929	59	90	85	164	84	197	96	143	85	112	64	219	1,398	697	7·23
1930	1	106	23	99	150	41	263	290	124	367	147	475	2,086	1,232	13·74
1931	40	5	179	291	249	432	162	155	145	31	196	60	1,945	1,121	16·44
1932	1	245	197	291	105	199	211	231	97	144	67	80	1,868	949	21·63
1933	178	..	71	127	281	113	188	186	270	87	219	299	2,019	1,063	20·78
1934	55	95	20	168	5	50	172	171	171	360	345	32	1,644	1,269	17·60
1935	36	26	118	147	92	144	299	201	281	136	48	71	1,599	1,109	23·29
1936	224	5	45	29	215	190	471	219	55	180	28	268	1,929	1,143	24·41
1937	193	99	87	21	114	128	77	187	145	291	42	278	1,662	870	25·67
Kara Kara—															
1927	45	62	36	12	232	97	247	231	83	130	62	123	1,360	850	14·34
1928	290	375	210	98	109	220	166	35	177	276	13	19	1,988	887	17·32
1929	57	139	80	160	73	194	86	156	82	128	78	167	1,400	724	5·95
1930	1	131	31	79	191	56	250	283	116	372	97	546	2,153	1,174	10·35
1931	23	8	218	246	303	461	191	144	160	34	210	35	2,033	1,200	13·45
1932	1	189	256	346	98	242	222	294	94	120	56	89	2,007	1,028	18·17
1933	160	..	53	132	261	120	277	175	245	104	295	424	2,246	1,216	19·25
1934	66	159	20	163	1	51	206	187	167	395	307	50	1,772	1,313	15·53
1935	76	43	113	212	98	142	377	189	294	226	37	71	1,878	1,265	25·08
1936	227	3	21	46	151	168	500	252	47	199	36	269	1,919	1,202	23·14
1937	222	95	42	19	129	98	76	229	135	332	26	258	1,661	896	21·99

Rainfall and Average Wheat Yield Per Acre in Wheat-growing Counties for the Years 1927 to 1937—*continued.*

County and Year.	Approximate Mean Rainfall each Month.												Total for Year.	Total Wheat-growing Period.	Average Wheat Yield per Acre.
					Wheat-growing Months.										
	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.			
	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Bushels.
Millewa—															
1927	27	6	25	2	27	36	117	58	65	75	79	22	539	378	·15
1928	36	441	106	36	47	170	88	13	68	68	3	25	1,101	454	3·43
1929	12	193	33	16	13	36	37	43	61	25	94	288	851	215	·02
1930	15	47	115	39	142	4	129	209	74	259	68	208	1,309	817	11·06
1931	25	2	128	202	150	287	92	61	154	69	106	30	1,306	813	8·32
1932	17	220	131	110	151	233	98	215	59	45	22	81	1,382	801	12·05
1933	153	1	19	21	114	23	121	144	143	59	213	142	1,153	604	5·76
1934	57	61	56	48	..	31	71	63	84	289	146	29	935	538	1·23
1935	51	5	74	110	40	62	100	71	121	130	4	59	827	524	3·23
1936	426	16	43	58	114	64	245	55	19	74	12	162	1,288	571	7·20
1937	196	10	47	30	71	185	68	191	36	163	30	127	1,154	714	9·67
Weeah—															
1927	30	30	38	3	98	44	161	134	85	66	42	49	780	588	4·22
1928	110	253	122	117	73	184	99	29	101	204	1	22	1,315	690	8·26
1929	24	39	45	49	50	97	46	80	56	32	67	191	776	361	2·49
1930	1	39	29	56	158	16	181	181	73	359	76	332	1,501	968	10·10
1931	28	..	96	151	180	280	90	105	181	39	100	20	1,270	875	9·84
1932	7	292	139	143	104	192	148	200	64	80	15	88	1,472	788	9·36
1933	141	..	45	48	192	33	122	147	150	68	127	185	1,258	712	8·36
1934	69	64	34	95	..	31	105	105	114	323	191	32	1,163	678	6·52
1935	26	2	67	98	72	121	142	114	138	183	31	52	1,046	770	10·03
1936	431	11	50	64	101	122	334	95	24	160	18	207	1,617	836	11·08
1937	139	43	101	11	63	135	92	211	63	215	36	196	1,305	779	12·75
Karkarooc—															
1927	40	24	25	7	78	47	155	99	66	111	49	45	746	556	3·99
1928	111	295	152	89	57	156	88	23	108	145	3	15	1,242	577	7·79
1929	21	69	34	109	30	76	29	81	52	31	79	191	802	299	2·26
1930	5	22	44	31	188	11	142	172	59	317	79	370	1,440	889	8·06
1931	26	2	163	255	230	324	110	51	152	62	90	4	1,469	929	9·37
1932	5	259	137	157	97	205	125	186	80	64	16	84	1,415	757	10·30
1933	117	..	27	33	154	40	200	134	148	66	168	252	1,339	742	8·96
1934	41	144	46	100	1	41	111	78	100	305	214	16	1,197	636	5·75
1935	38	9	70	93	46	107	136	74	145	173	18	69	978	681	9·65
1936	315	4	23	54	120	132	329	93	25	128	11	186	1,420	827	13·26
1937	179	36	55	12	83	175	62	179	41	285	26	176	1,309	825	13·97

Rainfall and Average Wheat Yield Per Acre in Wheat-growing Counties for the Years 1927 to 1937—*continued.*

County and Year.	Approximate Mean Rainfall each Month.												Total for Year.	Total Wheat-growing Period.	Average Wheat Yield per Acre.
					Wheat-growing Months.										
	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.			
	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Bushels.
Tatchera—															
1927	41	15	17	3	97	57	189	126	46	93	48	53	785	608	2·79
1928	312	329	172	93	72	170	84	30	109	179	9	15	1,574	644	8·84
1929	17	111	79	130	33	100	28	101	61	71	60	180	971	394	2·30
1930	1	35	56	27	186	20	144	149	76	319	76	527	1,616	894	7·79
1931	43	1	176	294	315	319	97	37	139	69	86	2	1,578	976	10·23
1932	1	250	167	243	97	185	160	222	111	69	29	89	1,623	844	13·02
1933	121	1	37	29	153	97	235	138	181	84	119	316	1,511	888	11·25
1934	47	226	40	135	..	43	120	116	89	323	266	29	1,434	691	6·42
1935	73	59	60	150	41	90	194	66	202	287	29	41	1,292	880	12·39
1936	210	10	6	43	138	144	393	113	25	142	8	189	1,421	955	15·44
1937	156	43	14	11	82	128	46	148	38	302	11	91	1,070	744	11·32
Gunbower—															
1927	31	18	18	4	117	59	182	157	43	103	36	57	825	661	3·60
1928	500	291	236	93	109	196	88	33	99	212	8	7	1,872	737	9·84
1929	19	103	50	187	37	124	21	140	100	124	41	160	1,106	546	7·21
1930	..	15	94	27	211	37	132	160	79	262	64	617	1,698	881	7·74
1931	48	1	172	290	237	297	104	45	108	96	106	..	1,504	887	11·84
1932	1	199	213	254	123	200	195	229	84	94	67	97	1,756	925	14·48
1933	91	..	72	30	157	183	236	199	193	109	186	286	1,742	1,077	14·82
1934	110	261	51	153	..	54	149	166	83	314	261	51	1,653	766	8·59
1935	87	121	68	190	69	109	250	89	240	254	30	79	1,586	1,011	17·45
1936	168	24	12	83	121	164	431	162	38	158	16	271	1,648	1,074	16·37
1937	138	46	5	44	89	95	44	158	77	215	11	79	1,001	678	10·79
Gladstone—															
1927	54	46	28	9	179	88	246	190	71	88	50	92	1,141	862	10·96
1928	364	326	237	90	122	221	138	32	146	255	10	20	1,961	914	15·24
1929	44	118	39	126	50	177	42	144	72	118	70	145	1,145	603	5·60
1930	..	91	100	59	282	46	204	229	95	338	106	622	2,172	1,194	13·94
1931	37	5	198	305	367	427	169	108	164	32	237	28	2,077	1,267	9·91
1932	2	186	291	364	127	222	222	283	109	106	60	91	2,063	1,069	14·99
1933	153	..	44	103	226	145	315	200	236	105	259	419	2,205	1,227	17·01
1934	79	188	22	173	..	60	223	156	142	416	293	53	1,805	997	12·06
1935	90	62	87	185	92	146	371	161	275	247	22	73	1,811	1,292	22·29
1936	196	5	13	44	157	143	548	191	40	194	24	207	1,762	1,273	19·20
1937	209	75	27	34	103	93	57	196	103	333	21	193	1,444	885	19·33

Rainfall and Average Wheat Yield Per Acre in Wheat-growing Counties for the Years 1927 to 1928—*continued.*

County and Year.	Approximate Mean Rainfall each Month.												Total for Year.	Total Wheat-growing Period.	Average Wheat Yield per Acre.
					Wheat-growing Months.										
	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.			
	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Bushels.
Bendigo—															
1927	54	25	21	5	139	95	254	175	55	81	60	93	1,057	799	8·47
1928	552	283	321	76	141	258	106	32	127	227	28	36	2,187	891	15·66
1929	33	152	17	216	41	148	21	159	60	94	66	129	1,136	523	8·47
1930	..	68	90	42	292	34	173	193	85	321	101	613	2,012	1,098	15·30
1931	48	4	311	295	325	437	194	99	155	63	187	·1	2,119	1,273	10·89
1932	2	151	306	370	121	222	205	286	104	122	37	100	2,026	1,060	16·44
1933	173	..	74	43	200	185	327	228	205	106	249	311	2,101	1,251	17·13
1934	128	184	28	127	2	64	169	136	94	390	292	66	1,680	855	10·60
1935	120	116	66	237	63	114	335	119	259	308	34	66	1,837	1,198	19·84
1936	127	19	10	78	164	147	454	177	40	192	29	261	1,698	1,174	19·09
1937	128	93	8	111	116	94	61	176	97	192	13	99	1,188	736	16 34
Rodney—															
1927	44	32	19	6	119	80	182	228	76	149	80	104	1,119	834	10·52
1928	384	471	343	138	178	294	129	37	123	253	9	24	2,383	1,014	16·66
1929	33	125	47	392	58	131	24	165	91	72	79	183	1,400	541	13·05
1930	..	44	94	41	258	22	170	218	117	323	102	528	1,917	1,108	15·69
1931	44	6	304	287	291	434	187	111	151	127	170	1	2,113	1,301	12·33
1932	1	63	298	415	69	277	217	265	160	119	54	66	2,004	1,107	16·66
1933	89	..	104	13	210	209	303	170	226	171	134	228	1,857	1,289	18·46
1934	290	265	58	151	1	65	181	186	102	403	332	122	2,156	938	12·74
1935	107	173	78	346	63	138	324	142	301	270	35	45	2,022	1,238	21·37
1936	182	28	6	176	86	179	451	225	67	217	49	281	1,947	1,225	21·75
1937	164	73	19	51	159	131	78	163	107	203	14	94	1,256	841	17·29
Moira—															
1927	35	54	19	6	135	83	184	253	105	214	64	64	1,216	974	14·43
1928	270	417	320	140	173	226	150	46	96	234	8	18	2,098	925	14·76
1929	30	119	125	352	87	123	39	159	136	99	75	162	1,506	643	16·16
1930	..	26	65	65	224	30	146	242	105	335	111	511	1,860	1,082	14·28
1931	70	19	334	268	378	487	188	128	152	178	189	6	2,397	1,511	15·43
1932	2	59	278	369	39	242	236	280	192	115	105	90	2,007	1,104	18·91
1933	93	2	70	37	194	202	247	163	261	149	142	296	1,856	1,216	17·83
1934	431	221	163	218	..	77	207	234	118	436	391	140	2,636	1,072	14·29
1935	115	133	106	380	57	153	300	160	253	316	24	113	2,110	1,239	22·67
1936	165	36	23	228	81	256	454	271	79	191	50	256	2,090	1,332	20·97
1937	206	68	33	58	145	148	91	204	121	278	43	102	1,497	987	19·13

WHEAT GROWING IN CONJUNCTION WITH SHEEP-GRAZING AND DAIRYING.

For the season 1935–36, statistics showing the extent to which mixed farming was practised in conjunction with wheat growing have been compiled in respect of each State in the Commonwealth. The tabulations were prepared by the Commonwealth Statistician from data prepared by each State.

An analysis of the tables for the State of Victoria discloses that wheat for grain was grown on 13,780 holdings in 1935–36. The total area of these holdings was 12,482,336 acres, and the area actually sown with wheat for grain 2,323,753 acres. On 9,974 holdings, or 72·4 per cent. of the total growing wheat for grain, there were 4,841,152 sheep, or 27·7 per cent. of the State's total of 17,457,291 sheep at 1st March, 1936.

On 11,787 of the holdings growing wheat for grain, or 85·5 per cent. of the total, there were 109,049 dairy cows at 1st March, 1936. Pigs numbering 41,100 were held on 5,482 holdings which also grew wheat for grain.

The following table shows the total area of holdings growing wheat for grain with particulars of wheat growing, sheep, dairy cattle, and pigs thereon.

Area under Wheat for Grain.	Holdings.		Wheat.	Sheep.		Dairy Cows.		Pigs.	
	Growing Wheat Grain.	Total Area.	Total Area.	Holdings With.	Total.	Holdings With.	Total.	Holdings With.	Total.
Acres.	No.	Acres.	Acres.	No.	No.	No.	No.	No.	No.
1– 19	1,729	1,011,373	15,444	1,182	650,532	1,630	28,705	876	11,918
20– 49	1,472	949,722	46,690	1,065	562,368	1,264	16,964	593	6,344
50– 99	1,820	1,285,193	126,973	1,317	702,466	1,487	15,611	658	5,374
100– 149	1,850	1,443,355	218,237	1,369	645,561	1,537	12,363	670	4,549
150– 199	1,542	1,264,846	258,255	1,120	458,689	1,275	8,301	527	2,371
200– 249	1,886	1,799,769	401,202	1,311	513,366	1,559	9,267	688	3,172
250– 299	989	1,055,702	261,950	691	290,706	847	4,867	387	1,773
300– 349	1,080	1,261,622	334,376	773	327,323	926	4,997	457	2,590
350– 399	399	497,697	145,424	299	117,130	354	2,061	176	796
400– 499	560	865,676	238,013	436	227,660	490	3,134	251	1,327
500– 599	241	451,036	125,985	213	136,400	218	1,263	101	474
600– 699	125	312,496	77,504	116	111,546	118	851	59	286
700– 799	39	106,965	27,990	36	37,469	37	279	19	44
800– 899	16	50,307	13,020	15	14,304	14	103	5	14
900– 999	14	41,389	12,790	13	14,683	13	79	7	20
1,000–1,249	16	73,746	17,030	16	28,107	16	146	7	46
1,250–1,499	1	5,632	1,270	1	1,532	1	24	1	2
1,500–1,749	1	5,800	1,600	1	1,300	1	34	..	..
Total ..	13,780	12,482,336	2,323,753	9,974	4,841,152	11,787	109,049	5,482	41,100

An analysis of the wheat productivity of each State was also made by the Commonwealth Statistician from data prepared by the State Statisticians. In respect of the State of Victoria the analysis shows that, although the average yield per acre for the State was 16·16

bushels, there were 2,607 holdings upon which 566,678 acres were sown with wheat for grain and from which yields of less than nine bushels per acre were obtained.

The following table shows the complete Victorian wheat production in bag series per acre for the season 1935–36 :—

Production Series (Bushels per Acre).	Wheat (for Grain) Production in Series.			
	Holdings.	Area Grain.	Production.	Production.
	No.	Acres.	Bushels.	Bags.
Under 3	739	184,450	270,891	88,526
3 and under 6 ..	797	171,639	753,265	246,165
6 „ 9 ..	1,071	210,589	1,549,059	506,228
9 „ 12 ..	1,253	228,869	2,397,195	783,397
12 „ 15 ..	1,472	248,603	3,328,454	1,087,730
15 „ 18 ..	1,856	275,197	4,519,868	1,477,081
18 „ 21 ..	1,865	266,811	5,231,646	1,709,688
21 „ 24 ..	1,550	235,821	5,315,204	1,736,995
24 „ 27 ..	1,477	228,024	5,827,043	1,904,262
27 „ 30 ..	808	140,029	3,993,835	1,305,175
30 „ 33 ..	635	100,468	3,147,335	1,028,541
33 „ 36 ..	128	17,346	604,102	197,419
36 „ 39 ..	96	12,615	470,266	153,682
39 „ 42 ..	19	2,035	83,260	27,209
42 „ 45 ..	6	467	20,358	6,653
45 „ 48 ..	6	385	18,253	5,965
48 and over	2	405	22,032	7,200
Total	13,780	2,323,753	37,552,066	12,271,916

Particulars of wheat productivity and of mixed farming associated with wheat growing in respect of any county or district in Victoria for the season 1935–36 may be obtained upon application to the Government Statist.

Varieties of Wheat. The following statement shows the areas under the principal varieties of wheat, including wheat for hay, for the seasons 1934–35 to 1936–37. The varieties are tabulated in order of popularity for the last-mentioned season. The percentages shown indicate the fluctuation which has taken place amongst the leading varieties.

Over 100 varieties of wheat were sown. The number which was tried in the Mallee greatly exceeded the number experimented with in any other district. A more extended list showing the area and percentage of each variety, and the ten principal varieties grown in each district, can be obtained on application to the Government Statist.

VARIETIES OF WHEAT SOWN IN EACH OF THE SEASONS, 1934–35, 1935–36, AND 1936–37.

Variety (in order of popularity, Season 1936–37).	1934–35.		1935–36.		1936–37.	
	Area Sown.	Percentage of total Area Sown.	Area Sown.	Percentage of total Area Sown.	Area Sown.	Percentage of total Area Sown.
	Acres.		Acres.		Acres.	
Ghurka	398,008	15·45	837,762	34·88	1,113,780	45·15
Ranee (incl. 4H) ..	557,430	21·64	530,637	22·10	550,301	22·31
Free Gallipoli ..	1,059,281	41·12	598,425	24·92	363,530	14·74
Sepoy	114,791	4·46	103,362	4·30	79,027	3·20
Dundee	85	..	6,482	·27	69,523	2·82
Nabawa	76,614	2·97	56,029	2·33	37,380	1·52
Rajah	51,568	2·00	38,747	1·61	37,331	1·51
Bencubbin	691	·03	6,712	·28	30,439	1·23
Major	40,863	1·59	28,476	1·19	21,165	·86
Bobbin	8,709	·34	11,000	·46	17,998	·73
Federation	37,843	1·47	23,405	·97	16,888	·68
Nizam	35,401	1·37	18,186	·76	13,567	·55
Waratah	21,881	·85	18,140	·75	12,568	·51
Mac's White ..	19,317	·75	12,524	·52	12,203	·49
Turvey	13,974	·54	10,935	·46	12,097	·49
Warden	8,560	·33	8,835	·37	8,707	·35
Currawa	14,858	·58	12,483	·52	7,589	·31
Baringa	45	..	1,599	·07	5,799	·24
Mogul	4,229	·16	4,509	·19	5,123	·21
Bena	8,259	·32	5,975	·25	4,781	·19
Bald Early	11,918	·46	6,866	·29	4,689	·19
Gluyas	10,718	·42	6,785	·28	4,147	·17
Strongbolt	4,305	·17	4,108	·17	3,920	·16
Penny	8,972	·35	6,167	·27	3,270	·13
Sword	1,581	·06	2,447	·10	2,914	·12
Other Varieties ..	66,118	2·57	40,952	1·69	27,928	1·14
Total	2,576,019	100·00	2,401,548	100·00	2,466,664	100·00

The most interesting feature of the above statement is the rise and fall in popularity of certain varieties. For the season 1936–37 increased areas have been sown with Ghurka, Dundee, and Bencubbin as compared with 1934–35, while decreases have taken place in respect of Free Gallipoli, Nabawa, and Sepoy.

Many changes have also taken place in the leading varieties of wheat in other Australian wheat-growing States during recent years. In New South Wales, Ford and Nabawa occupied very minor positions on the list in 1929, but have now risen to first and second places respectively. On the other hand Nabawa, which was the leading variety with 47 per cent. of the total area in Western Australia in 1929, has declined to sixth place on the list, with only 6 per cent. of the area in 1936. In South Australia the area sown with the varieties Ranee, Nabawa, and Sword was only 3.72 per cent. of the total area in 1929, but the area now sown with these varieties amounts to 49.94 per cent. of the total area. Free Gallipoli became the leading variety in Victoria in 1929–30, and continued as such until the season 1934–35, when it was superseded by Ghurka.

PRINCIPAL VARIETIES OF WHEAT SOWN IN AUSTRALIAN STATES, 1936–37.

South Wales.		Victoria.		South Australia.		Western Australia.	
Variety.	Percentage of Total Area.	Variety.	Percentage of Total Area.	Variety.	Percentage of Total Area.	Variety.	Percentage of Total Area.
Ford ..	20·93	Ghurka ..	45·15	Ranee ..	22·57	Bencubbin	31·93
Nabawa ..	20·66	Ranee (inc. 4H)	22·31	Nabawa ..	15·55	Gluclub ..	11·99
Dundee ..	12·31	Free Gallipoli	14·74	Sword ..	11·82	Merredin ..	9·83
Baringa ..	6·75	Sepoy ..	3·20	Waratah ..	5·42	Gluyas Early	8·31
Waratah ..	6·56	Dundee ..	2·82	Gluyas ..	5·37	Totadgin ..	6·99
Bobbin ..	4·08	Nabawa ..	1·52	Ford ..	5·16	Nabawa ..	6·32
Ranee ..	4·07	Rajah ..	1·51	Ghurka ..	2·98	Noongaar ..	5·68
All Other ..	24·64	All Other ..	8·75	All Other	31·13	All Other ..	18·95
Total ..	100·00		100·00		100·00		100·00

DISTRICT PERCENTAGE OF TOTAL AREA UNDER WHEAT IN VICTORIA, AND ESTIMATED QUANTITY OF SEED AND FERTILIZERS USED PER ACRE 1937–38.

District.	Percentage (according to acreage) of total area in the State.	Weight per acre of—	
		Seed Sown.	Fertilizers Used.
		lb.	lb.
Central	1·08	95	106
North-Central	·96	103	109
Western	1·50	89	139
Wimmera	31·12	75	87
Mallee	44·41	58	62
Northern	19·67	71	84
North-Eastern	1·10	75	101
Gippsland	·16	86	105
Total State	100·00	67	77

The rate of sowing for the season 1934-35 in the principal wheat growing counties, ranged from 45 lb. of seed per acre in the County of Millewa to 86 lb. in Ripon. Manure used varied from 38 lb. per acre in Millewa to 117 lb. in Ripon. On 78,200 acres sown to wheat, of which 58,000 acres were in the Mallee district, no manure at all was used. Superphosphates used on wheat areas in the season 1936-37 amounted to 66,700 tons, valued at country railway stations at £270,000.

Fallow. The large area of land fallowed for the next season's cropping operations is a feature of the three wheat-growing districts. Of the 2,483,163 acres in fallow during the season 1936–37, 1,031,812 were in the Mallee, 825,874 in the Wimmera, and 447,876 in the Northern districts. The total area of fallow in these three districts—2,305,562 acres—represented 93 per cent of the land fallowed in the State.

The following table shows the acreage in fallow in various years, together with the area sown to wheat in each succeeding season :—

LAND IN FALLOW AND WHEAT SOWN.

Season.	Land in Fallow.	Season.	Area Sown to Wheat.
	acres.		acres.
1901–02	681,778	1902–03	2,155,928
1911–12	1,469,608	1912–13	2,471,586
1921–22	2,052,964	1922–23	2,857,533
1927–28	2,692,044	1928–29	3,854,622
1928–29	2,683,462	1929–30	3,731,699
1929–30	2,482,662	1930–31	4,788,560
1930–31	2,590,629	1931–32	3,705,555
1931–32	2,145,819	1932–33	3,320,504
1932–33	2,633,287	1933–34	3,208,619
1933–34	2,543,043	1934–35	2,576,019
1934–35	2,216,464	1935–36	2,401,548
1935–36	2,358,777	1936–37	2,466,664
1936–37	2,483,163	1937–38	2,776,301
1937–38	2,604,556		

Wheat standard. The weight of an imperial bushel of wheat is 60 lb., but the actual weight of a bushel of Victorian wheat of fair average quality standard is determined annually by the Chamber of Commerce.

The following table shows the standard determined in Victoria for each of the ten seasons, 1928–29—1937–38 :—

Season.	Weight of Bushel of Wheat, f.a.q.	Season.	Weight of Bushel of Wheat, f.a.q.
	lb.		lb.
1928–29	62	1933–34	60
1929–30	62	1934–35	60
1930–31	58½	1935–36	63½
1931–32	62¾	1936–37	62
1932–33	62	1937–38	63½

Farmers growing Wheat for Grain. The following statement shows the number of farmers engaged in the growing of wheat for grain.

NUMBER OF FARMERS WHO PLANTED TWENTY OR MORE ACRES OF WHEAT FOR GRAIN, SEASONS 1931–32 TO 1936–37.

1931–32.	1932–33.	1933–34.	1934–35.	1935–36.	1936–37.
14,846	15,299	14,319	12,582	12,051	12,090

Stocks of wheat and flour. It is estimated that about 14,500,000 bushels of wheat per annum are required locally for food and seed. The stocks of wheat and flour in the State at 31st October in each of the five years, 1933–1937, were as follows :—

STOCKS OF WHEAT AND FLOUR, VICTORIA.

At 31st October—	Quantity in Bushels.		
	Wheat.	Flour (equivalent in Wheat).	Total.
1933	7,366,733	1,524,598	8,891,331
1934	12,272,300	1,847,300	14,119,600
1935	5,840,992	1,253,637	7,094,629
1936	4,923,693	1,853,528	6,777,221
1937	6,990,373	1,295,631	8,286,004

Oats. Oats are grown in Victoria mainly as a hay crop. The area harvested (season 1936–37) for hay was 940,058 acres, and for grain 381,069 acres, which produced 1,069,358 tons of hay, and 6,107,885 bushels of grain respectively. About 40 per cent. of the area for grain is in the Mallee district, but the area for hay is spread over all districts. More than 70 varieties of oats were sown, the most popular being Algerian (88 per cent.), Mulga (4 per cent.), and Lachlan (1 per cent.).

Hay. Of the total area under hay in 1936–37, as shown in the table on page 418, 940,058 acres under oats produced 1,069,358 tons, 72,837 acres under wheat produced 88,070 tons, 36,737 acres under lucerne, &c., produced 56,482 tons, and 131,980 acres under grass produced 189,139 tons; the yields per acre of these varieties of hay were 1·14, 1·21, 1·54, and 1·43 tons respectively. The quantity of straw returned for the season 1936–37 was 22,225 tons.

Barley. The area under barley for grain in 1936–37 was 100,003 acres, of which 83,802 were under malting (2 row), and 16,201 under feed (6 row) barley. Although barley is grown generally throughout the State, Grant has always been the chief barley-producing county. The figures in the subjoined table show the acreage, production, and yield per acre, for each of the five years 1932–33—1936–37 :—

BARLEY PRODUCTION, 1932-33 TO 1936-37.

Year ended March—	Area under Crop.		Produce.		Average per Acre.		
	Malting.	Other.	Malting.	Other.	Malting.	Other.	Total.
	acres.	acres.	bushels.	bushels.	bushels.	bushels.	bushels
1933 ..	75,425	18,130	1,581,814	413,632	20·97	22·81	21·33
1934 ..	84,732	21,607	1,418,613	470,368	16·74	21·77	17·76
1935 ..	70,962	16,637	1,275,037	334,481	17·97	20·11	18·37
1936 ..	98,799	17,572	1,944,237	370,190	19·68	21·07	19·89
1937 ..	83,802	16,201	1,782,931	360,178	21·28	22·23	21·43

Maize. Maize for grain is cultivated mainly in the Gippsland district, but two or three thousand acres are regularly grown in the Mornington and North-eastern districts. It is grown in Victoria both for grain and for green fodder. The acreages for 1936–37 were, for grain 20,115 acres, and for fodder 26,543 acres. The area, production and average yield for each of the five seasons, 1932–33 to 1936–37, are given in the following table :—

MAIZE PRODUCTION, 1932-33 TO 1936-37.

Season.	For Green Fodder.	For Grain.		
		Area.	Production.	Yield per acre.
	acres.	acres.	bushels.	bushels.
1932–33	25,870	16,425	477,145	29·05
1933–34	29,053	19,538	644,033	32·96
1934–35	24,904	18,727	719,360	38·41
1935–36	26,971	20,377	638,643	31·34
1936–37	26,543	20,115	794,506	39·50

The annual average yield of the last five seasons was 34·39 bushels per acre, as compared with 45·0 in 1910–15, and 65·4 in 1900–05. The relatively light yield per acre for the latest five-year period was probably due to the cultivation of new areas, which are less fertile than the rich river flats upon which this cereal was grown exclusively in earlier periods, and to losses by floods.

Potatoes.

Victoria is the largest potato-producing State in the Commonwealth. Out of a total area of 125,000 acres planted in 1935–36 to potatoes. 44,000 acres were grown in this State.

The cultivation of the potato crop in Victoria is confined mainly to the central highlands, the South-western district and the Gippsland district. These districts are favoured with good average rainfall, varying from 30 to 50 inches per annum, which is fairly well distributed throughout the year.

The following table shows the area, yield and value of potatoes for each of the five seasons, 1932–33 to 1936–37 :—

POTATO PRODUCTION, 1932-33—1936-37.

Season.	Area.	Production.	Average Yield.	Gross Value.
	acres.	tons.	tons.	£
1932–33 ..	69,783	182,471	2·61	775,502
1933–34 ..	60,856	142,132	2·34	753,300
1934–35 ..	54,214	109,329	2·02	956,629
1935–36 ..	44,287	104,125	2·35	826,492
1936–37 ..	45,627	196,623*	4·31	614,447

* Of this amount, 46,732 tons were held on farms for seed, stock feed, &c. In previous years this information was not collected separately.

Onions.

Onions are grown in nearly every county south of the Dividing Range. The returns for last season show that in Grenville the yield was 10,870 tons from 1,459 acres ; in Villiers, 9,854 tons from 1,215 acres ; in Polwarth 9,123 tons from 996 acres ; in Grant 5,918 tons from 919 acres ; in Bourke 3,500 tons from 552

acres, in Buln Buln 3,516 tons from 456 acres; and in Mornington 1,888 tons from 214 acres. The following statement shows the area, yield and value for each of the last five years :—

ONION PRODUCTION, 1932–33 TO 1936–37.

Season—	Area.	Production.	Average Yield.	Gross Value.
	acres.	tons.	tons.	£
1932–33	7,109	41,013	5·77	133,292
1933–34	6,785	46,068	6·79	195,789
1934–35	5,928	36,187	6·10	260,094
1935–36	5,441	26,143	4·80	235,287
1936–37	5,969	46,130	7·73	184,099

Metropolitan prices of agricultural and pastoral products.

The prices which appear below are the average prices realized for the marketed produce of the seasons enumerated. Average prices, representing the mean of prices ruling each month and not taking into account the quantities sold during each month, are shown on page 463.

METROPOLITAN WHOLESALE PRICES REALIZED FOR AGRICULTURAL AND PASTORAL PRODUCE, 1927–28 TO 1936–37.

Average Prices Realized for Produce of Season—	Wheat.	Oats.	Barley (Malting).	Maize.	Potatoes.	Onions.	Wool.
	per bushel.	per bushel.	per bushel.	per bushel.	per ton.	per ton.	per lb.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1927–28 ..	5 4	4 2	5 3	4 4	82 0	170 0	1 8·56
1928–29 ..	4 9	3 1	4 2	5 1	217 0	178 0	1 5·37
1929–30 ..	4 4	3 4	3 9	5 5	115 0	62 0	0 10·30
1930–31 ..	2 6	1 9½	2 6	3 9	72 0	53 0	0 8·65
1931–32 ..	3 2½	2 0	3 0½	4 3	92 0	237 0	0 8·76
1932–33 ..	2 10¾	1 11	2 6	4 7½	85 0	65 0	0 8·18
1933–34 ..	2 11½	2 2½	2 7	3 6	106 0	85 0	1 2·71
1934–35 ..	3 3¼	2 3½	2 10½	4 4	175 0	143 9	0 9·52
1935–36 ..	4 1	2 2½	2 9½	5 1	158 9	180 0	1 1·96
1936–37 ..	5 5½	2 8	4 3½	5 6	72 6	146 0	1 4·39

Vine Production.

The production of dried vine fruits far exceeds the requirements for home consumption. Of the total production of 44,877 tons in the season 1936–37, 35,000 tons were exported to the United Kingdom, Canada, and New Zealand. The Australian production of dried vine fruits amounted to approximately 73,000 tons and was the highest yield since the record season of 1932–33. The

Victorian portion represented about 61 per cent. of this output. Particulars of vine production for the five years 1932–33—1936–37 are given in the following table :—

VINE PRODUCTION, 1932–33 TO 1936–37.

Season.	Number of Growers.	Area.		Produce.				
		Bearing.	Not Bearing.	Grapes gathered.	Wine made.	Dried Fruits.		
						Raisins.		Currants.
						Lexias.	Sultanas.	
		acres.	acres.	cwt.	gallons.	cwt.	cwt.	cwt.
1932–33..	2,524	36,852	2,292	4,200,378	1,610,649	92,744	758,617	156,291
1933–34..	2,553	37,385	3,100	3,579,045	1,691,391	86,655	592,581	149,519
1934–35..	2,509	37,592	3,588	3,239,660	1,276,176	78,532	514,209	176,023
1935–36..	2,512	37,851	3,230	3,463,202	1,683,049	92,481	617,237	88,414
1936–37..	2,458	38,329	3,566	3,903,430	1,818,917	90,243	655,090	152,202

Of the total quantity of grapes gathered in 1936–37, it is estimated that 242,587 cwt. were used for making wine and spirits, 3,585,771 cwt. for raisins and currants, and 75,072 cwt. for table consumption.

Of the dried fruit, 82,839 cwt. of lexias, 551,866 cwt. of sultanas, and 142,048 cwt. of currants were made in the Mildura shire, and 7,343 cwt. of lexias, 102,626 cwt. of sultanas, and 9,534 cwt. of currants in the Swan Hill shire.

Tobacco. About six years ago, following on the imposition of emergency tariff rates, tobacco growing promised to occupy an important place among the agricultural industries of Victoria. Economic circumstances, however, coupled with heavy losses through disease, caused a large decrease in the number of growers and in the area planted. The 1936–37 crop amounted to 15,658 cwt., which was obtained from 5,492 acres.

The following table furnishes details of the area, production, and average yield in each of the five seasons, 1932–33 to 1936–37 :—

TOBACCO PRODUCTION, 1932–33 TO 1936–37.

Season—	Area.	Production.	Produce per Acre.
	acres.	cwt. (dry).	cwt. (dry).
1932–33	13,418	36,371	2·71
1933–34	8,900	13,132	1·47
1934–35	4,765	13,405	2·81
1935–36	5,840	25,706	4·40
1936–37	5,492	15,658	2·85

The gross value of tobacco produced in 1936–37 was £138,965 (1s. 7d. per lb.) as compared with £231,114 (1s. 7¼d. per lb.) in 1935–36, £135,433 (1s. 9½d. per lb.) in 1934–35, £132,263 (1s. 9½d. per lb.) in 1933–34, and £392,206 (1s. 11d. per lb.) in 1932–33.

Orchards. The extent of cultivation of each important class of fruit on holdings of one acre and upwards during the seasons 1931–32 and 1934–35 is shown in the following table :—

RETURN SHOWING THE NUMBER OF FRUIT TREES, PLANTS, ETC., IN ORCHARDS AND GARDENS WHERE FRUIT WAS GROWN FOR SALE, 1931–32 AND 1934–35.

Fruit.	Number of Trees, Plants, &c.					
	1931–32.			1934–35.		
	Bearing.	Not Bearing.	Total.	Bearing.	Not Bearing.	Total.
Apples	2,361,472	680,239	3,041,711	2,385,315	510,281	2,895,596
Pears	826,854	188,546	1,015,400	848,066	238,747	1,086,813
Quinces	74,492	11,735	86,227	57,659	13,951	71,610
Plums	283,770	72,999	356,769	277,492	70,477	347,969
Prunes	79,773	4,790	84,563	62,621	1,873	64,494
Cherries	79,471	55,046	134,517	73,383	64,217	137,600
Peaches	871,919	252,348	1,124,267	842,985	314,466	1,157,451
Apricots	339,526	41,033	380,559	329,415	51,337	380,752
Nectarines	14,896	5,737	20,633	13,787	4,454	18,241
Oranges	452,368	101,232	554,000	435,739	64,477	500,216
Lemons	141,030	40,441	181,071	123,405	37,658	161,063
Loquats	2,861	792	3,653	3,101	744	3,845
Figs	29,602	7,421	37,023	25,528	9,829	35,357
Persimmons	575	62	637	699	39	738
Total Large Fruits	5,558,609	1,462,421	7,021,030	5,479,195	1,382,550	6,861,745
Raspberries	339,761	..	339,761	337,000	..	337,000
Loganberries	143,325	..	143,325	146,260	..	146,260
Strawberries	6,011,409	..	6,011,409	4,565,409	..	4,565,409
Gooseberries	152,669	36,085	188,754	169,848	23,264	193,112
Mulberries	774	103	877	716	105	821
Currants (Red, White, and Black)	27,023	9,124	36,147	30,179	11,788	41,967
Olives	4,064	114	4,178	3,866	42	3,908
Passion-fruit	69,986	40,710	110,696	82,115	37,824	119,939
Almonds	28,929	9,297	38,226	28,278	8,660	36,938
Walnuts	7,172	3,208	10,380	7,766	3,039	10,805
Filberts	527	1,804	2,331	1,943	164	2,107
Chestnuts	523	271	794	607	260	867
Total Nuts	37,151	14,580	51,731	38,594	12,123	50,717

Fruit growing 1931-32 to 1936-37. Normal yields of all kinds of fruits other than apricots were obtained in the season 1936–37. The gross value of fruit produced was £1,811,845, as compared with £1,649,259 in 1935–36. Fruit is produced in Victoria in excess of the State's requirements. Large quantities are exported, both overseas and interstate. The principal varieties grown in the State are apples, pears, peaches, and citrus. The apple and pear crops for the season 1936–37 amounted to 2,873,327 and 1,657,763 bushels respectively, and from this production there were exported to the United Kingdom and Continental ports 727,000 cases of apples and 490,000 cases of

pears. These figures reveal that for such season exports of apples increased by 117,000 cases and pears by 80,000 cases. A considerable quantity of apricots, peaches and pears is grown, mostly in irrigated areas, for canning purposes. Notwithstanding that the apricot crop was abnormally low, the total Victorian output of canned apricots, peaches and pears for the 1937 season was 1,722,000 cases—an increase of 13 per cent. on the highest quantity previously packed in this State. This output represented 74 per cent. of the total Australian production and comprised 65,000 cases of apricots, 996,000 cases of peaches and 661,000 cases of pears. In addition to the fruits shown in the subjoined table, large quantities of melons, rhubarb and tomatoes were produced in orchards, the following being the quantities returned for 1936–37 :—Melons, 9,301 cwt. ; rhubarb, 28,387 dozen bundles ; tomatoes, 288,442 bushels.

FRUIT GROWING, 1931–32 TO 1936–37.

—	1931–32.	1932–33.	1933–34.	1934–35.	1935–36.	1936–37.
Number of Growers ..	7,049	7,076	6,930	6,685	6,712	6,621
	acres.	acres.	acres.	acres.	acres.	acres.
Area	75,280	75,428	75,134	74,763	74,006	75,169
	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.
Kind of Fruit—						
Apples	1,015,169	3,217,074	2,418,430	2,085,081	2,417,425	2,873,327
Pears	878,171	1,172,204	1,005,775	1,021,780	1,492,062	1,657,763
Quinces	41,836	79,975	54,836	42,452	55,454	45,116
Apricots	267,121	303,730	368,676	260,161	350,793	179,824
Cherries	25,009	30,597	42,347	30,712	41,509	39,509
Nectarines ..	4,995	13,871	14,490	13,610	9,013	12,681
Peaches	697,204	1,351,330	970,541	1,173,031	915,811	1,269,716
Plums	106,113	263,819	197,017	194,843	149,791	215,424
Prunes	31,021	107,620	70,019	70,968	63,626	70,024
Lemons	224,144	165,335	208,546	220,737	205,089	181,920
Oranges	647,410	566,398	658,461	639,325	618,290	580,526
Figs	18,852	16,974	19,184	16,228	15,755	20,260
Passion Fruit ..	13,392	24,861	29,514	22,326	21,410	26,635
Other Large Fruits ..	4,578	6,077	4,264	4,460	4,831	4,820
	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.
Blackberries ..	117	815	1,322	968	993	924
Cape Gooseberries ..	254	239	179	74	135	150
Currants	151	298	328	350	314	283
Gooseberries ..	1,632	5,525	5,597	4,620	3,130	4,131
Loganberries ..	600	4,261	4,164	3,064	2,510	2,961
Mulberries	23	57	37	39	22	24
Raspberries	1,506	2,484	3,608	2,521	2,380	2,816
Strawberries ..	1,770	10,596	8,488	7,700	5,183	6,488
	lb.	lb.	lb.	lb.	lb.	lb.
Almonds	80,537	102,856	102,250	94,808	89,568	129,551
Chestnuts	19,227	18,735	34,143	24,507	39,843	17,355
Filberts	412	1,764	868	1,178	1,296	793
Walnuts	54,013	36,534	56,919	37,928	56,859	42,481

Dried fruit (exclusive of Raisins and Currants).

The production of the various kinds of dried tree fruits for each of the last five seasons is shown in the following statement. Particulars in respect of dried vine fruits appear on page 439.

DRIED TREE FRUITS, 1932-33 TO 1936-37.

Year ended June—	Apples.	Apricots.	Figs.	Nectarines.	Peaches.	Pears.	Prunes.	Total.
	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
1933 ..	7,704	155,970	8,272	1,845	187,194	39,315	847,375	1,247,675
1934 ..	1,856	255,971	5,838	4,945	145,624	72,106	796,296	1,282,636
1935 ..	3,301	116,007	6,239	379	165,363	22,773	571,715	885,777
1936 ..	5,219	113,600	7,281	384	73,780	51,652	851,192	1,103,108
1937 ..	1,529	32,495	5,287	1,232	96,862	58,564	1,023,484	1,219,453

Market gardens.

The area under market gardens in the season 1936–37 was 20,790 acres. As agricultural statistics are collected only in respect of areas of one acre and over, they do not provide a complete census of vegetable growing, but they give reliable information in respect of operations conducted on a commercial basis. These gardens are generally situated near large centres of population, and the producers are able to dispose of the bulk of their goods with a minimum loss from waste, &c. The total value of production of market gardens, on the basis of £50 per acre, which is regarded as a fair average return, would be approximately £1,000,000. This does not include crops of one acre and over of potatoes, onions, mangel-wurzel, beet, carrots, parsnips, and turnips grown in market gardens, such crops being tabulated under their respective heads in the returns relating to agriculture.

Minor Crops.

The following is a return of the minor crops of the State for the last two seasons. Details respecting each of these crops may be viewed at the office of the Government Statist.

MINOR CROPS, 1935–36 AND 1936–37.

Crop.	1935–36.		1936–37.	
	Area.	Produce.	Area.	Produce.
	Acres.		Acres.	
Rye for grain ..	1,117	9,733 bushels	1,185	10,388 bushels
Peas for grain ..	7,217	128,987 bushels	6,637	151,608 bushels
Beans for grain ..	1,068	4,522 bushels	1,143	14,128 bushels
Grass and clover seeds	8,222	74,158 bushels	9,406	108,791 bushels
Millet—Broom ..	635	3,190 cwt. fibre 2,698 cwt. seed	1,250	6,577 cwt. fibre 6,404 cwt. seed
Sugar Beet	3,165	37,634 tons beet producing 5,115 tons of sugar	3,475	31,079 tons beet producing 4,180 tons of sugar
Flax	1,068	3,811 cwt. seed 1,049 cwt. fibre 2,220 cwt. tow	927	2,130 cwt. seed 848 cwt. fibre 1,725 cwt. tow
Hops	123	2,080 cwt.	142	2,450 cwt.
Chicory	480	412 tons	492	625 tons
Garlic	30	37 tons	28	50 tons
Sunflowers	283	1,871 cwt.	277	2,655 cwt.
Flowers	483	..	803	..
Nurseries	1,036	..	1,339	..
Mangel-wurzels ..	651	7,164 tons	758	8,775 tons
Beet, Carrots, &c. ..	272	1,147 tons	562	3,942 tons
Green Forage ..	111,056	..	102,744	..
Pumpkins	1,246	5,019 tons	1,469	6,754 tons
Canary Seed ..	1,030	3,129 cwt.	1,314	3,506 cwt.

Fertilizers. The only fertilizer used on wheat areas is "Superphosphate 22 per cent". It is also used on 90 per cent. of the oat areas fertilized. The following table shows the number of holdings upon which fertilizers were applied and the quantities used in the various seasons.

ARTIFICIAL FERTILIZERS USED.

Season.		Number of Holdings.	Area Fertilized.	Quantity Used.
			Acres.	Tons.
1901–02	Crops and Pastures	11,439	556,777	23,535
1911–12		26,159	2,676,408	82,581
1921–22		37,835	3,848,184	150,012
1931–32		38,844	3,927,208	163,234
1932–33		42,627	4,764,641	199,557
1933–34		43,268	5,067,382	217,251
1934–35		43,482	4,939,170	211,657
1935–36	Crops ..	35,224	3,596,925	146,740
	Pastures ..	21,300	2,048,389	105,157
1936–37	Crops ..	36,238	3,709,563	157,865
	Pastures ..	25,817	2,911,181	148,981

Machinery used on Holdings.

A comparison of the numbers of farming implements in use on rural holdings in Victoria in recent years is shown in the following table. Increases in the numbers of engines, milking plants, shearing plants and tractors are particularly noticeable.

MACHINERY IN USE ON RURAL HOLDINGS.

Year.	Chaff-cutters.	Cream Separa-tors.	Cultiva-tors.	Engines.	Graders.	Grain Drills.	Harrows.	Harves-ters.
	No.	No.	No.	No.	No.	No.	No.	No.
1933 ..	26,311	47,789	38,845	24,655	5,659	28,241	55,734	11,631
1934 ..	26,244	47,681	39,001	25,645	5,728	27,674	55,798	11,047
1936 ..	26,325	47,672	37,971	27,436	5,610	27,206	55,770	10,521
1937 ..	26,185	47,719	37,979	28,693	5,519	27,216	55,612	10,522

Year.	Headers.	Milking Plants.	Plough.	Reapers and Binders.	Shearing Plants.	Strippers.	Threshing Machines.	Tractors.
	No.	No.	No.	No.	No.	No.	No.	No.
1933 ..	7,123	4,370	79,282	23,413	3,962	2,097	524	5,311
1934 ..	6,959	4,353	79,583	23,211	4,057	1,926	511	5,373
1936 ..	6,725	4,994	78,353	22,787	4,386	1,823	538	5,727
1937 ..	6,888	5,702	77,961	22,517	4,430	1,671	498	6,270

Persons employed on Rural Holdings.

Information is collected annually as to the number of persons ordinarily engaged in farm work on rural holdings of one acre or more. Persons absent from their farms for the greater portion of the year following other occupations, as well as temporary hands engaged in harvesting, &c., are excluded from the tabulation. In respect of female employees, it is evident that numbers of occupiers misinterpret the questions and wrongly include those who, though they may give some assistance out-doors, are primarily engaged as domestic servants. During the years, 1932–33 to 1936–37 the numbers so engaged were as follows :—

PERSONS ENGAGED ON RURAL HOLDINGS, INCLUDING WORKING PROPRIETORS, ETC., BUT EXCLUDING CASUAL AND SEASONAL WORKERS, 1932–33 TO 1936–37.

Year ending March.	Males.	Females.	Total.
	No.	No.	No.
1933	104,977	12,527	117,504
1934	102,920	10,548	113,468
1935	102,100	10,048	112,148
1936	101,016	8,842	109,858
1937	100,381	8,672	109,053

Rates of Wages—Rural Holdings.

In the next return will be found particulars of the rates of wages paid (with rations) upon rural holdings during 1936–37. The information has been furnished by the occupiers of holdings.

RATES OF WAGES ON RURAL HOLDINGS, 1936–37.

Occupations.	Prevailing Rate.	Range.
Ploughmen	35s. per week ..	20s. to 60s. per week
Farm labourers	34s. per week ..	20s. to 60s. per week
Threshing machine hands ..	1s. 1d. per hour	9d. to 1s. 6d. per hour
Harvest hands	9s. 3d. per day ..	6s. to 12s. 6d. per day
Milkers	27s. per week ..	15s. to 40s. per week
Maize pickers (without rations)	8d. per bag of cobs	6d. to 1s. per bag of cobs
Married couples	53s. 6d. per week	35s. to 80s. per week
Female servants	21s. per week ..	15s. to 40s. per week
Shearers, hand (without rations)	32s. 6d. per 100 sheep	27s. 6d. to 40s. per 100 sheep
,, machine (without rations)	34s. 6d. per 100 sheep	27s. 6d. to 50s. per 100 sheep
Gardeners, market	41s. per week ..	30s. to 60s. per week
,, orchard	49s. per week ..	35s. to 63s. per week
Vineyard hands	52s. per week ..	25s. to 72s. per week

Financial Assistance to Primary Producers.

In recent years legislative provision has been made by both the Commonwealth and State Parliaments for granting financial relief to primary producers. These provisions have been described in previous issues of the *Year-Book*. The Commonwealth Parliament has provided further financial assistance of the following nature :—

(*a*) The payment to each primary producer, on furnishing satisfactory evidence in support of his claim, of a subsidy of 10s. for each ton of artificial manure used by him during the year ending 30th June, 1938, in the production of primary produce other than wheat.

(*b*) The payment of the following bounties to growers of apples, pears, and citrus fruits in respect of such fruits exported from the Commonwealth in accordance with the prescribed conditions.

2½d. per bushel case of apples or pears exported during the year 1937.

2s. for each large export case of oranges, grape fruit and lemons, and 1s. 4d. for each bushel case (Australian and Standard) of oranges, lemons, grape fruit and mandarins exported to destinations other than New Zealand during the year 1937. Provided that the bounty shall not be payable in respect of navel oranges exported to the United Kingdom and the Continent of Europe after 31st July, 1937, and to all other destinations after 31st August, 1937.

PASTORAL AND DAIRYING INDUSTRIES.

Live Stock.

The pastoral and dairying industries have always been important sources of wealth to the State, and their increasing value in recent years indicates that both pastures and stock are, on the whole, steadily improving. The next table, which shows the numbers of horses, dairy cows, other cattle, sheep and pigs, indicates the progress of stock breeding in Victoria.

LIVE STOCK IN VICTORIA, 1861 TO 1937.

At 1st March—	Horses (including Foals).	Cattle—		Sheep.	Pigs.
		Dairy Cows.	Other.		
	number.	number.	number.	number.	number.
1861	76,536	197,332	525,000	5,780,896	61,259
1871	209,025	212,193	564,534	10,477,976	180,109
1881	275,516	329,198	957,069	10,360,285	241,936
1891	436,469	395,192	1,387,689	12,692,843	282,457
1901	392,237	521,612	1,080,772	10,841,790	350,370
1911	472,080	668,777	878,792	12,882,665	333,281
1921	487,503	620,005	955,154	12,171,084	175,275
1931	379,872	669,132	760,788	16,477,995	281,245
1933	372,907	887,996	1,012,926	17,512,394	287,627
1934	361,005	910,187	1,092,048	17,195,969	240,530
1935	357,877	951,849	1,133,231	16,783,631	265,006
1936	356,106	987,676	1,103,570	17,457,291	314,301
1937	357,158	968,555	1,037,204	17,663,103	318,673

For the purpose of showing the varying extent of pastoral pursuits in Victoria as indicated by the number of live stock grazed, it is necessary to express the various kinds of live stock in common terms. An arbitrary equivalent of ten sheep to each head of the larger kinds of live stock has, therefore, been taken and the total live stock grazed expressed as sheep :—

Year.	Equivalent in Sheep of Live Stock Grazed.	Year.	Equivalent in Sheep of Live Stock Grazed.
	No.		No.
1861	13,769,576	1931	34,575,915
1871	20,335,496	1933	40,250,684
1881	25,978,115	1934	40,828,369
1891	34,886,343	1935	41,213,201
1901	30,788,000	1936	41,930,811
1911	33,079,155	1937	41,292,273
1921	32,797,704		

When making comparisons of the figures in the foregoing table, consideration should be given to the varying acreage under cultivation as shown on page 413.

Size of holdings and numbers of live stock.

The next table shows the numbers of horses, cattle, sheep, and pigs on holdings of various sizes, and the total numbers on Crown lands that are not held conjointly with privately-owned land, at March, 1934.

SIZE OF HOLDINGS AND NUMBERS OF LIVE STOCK THEREON, MARCH, 1934.

Size of Holdings. (In Acres.)	Numbers of Live Stock on Land Occupied.				
	Horses.	Cattle.		Sheep.	Pigs.
		Dairy Cows.	Other Cattle.		
1 and under 50	22,903	62,412	42,471	44,554	16,543
50 and under 100 ..	18,887	99,010	64,504	103,955	27,138
100 and under 500 ..	105,489	494,165	409,198	2,408,661	132,739
500 and under 1,000 ..	93,667	136,645	199,998	3,794,064	34,864
1,000 and under 5,000 ..	81,757	83,458	260,829	7,765,425	20,429
5,000 and under 10,000 ..	5,236	5,661	51,079	1,642,299	748
10,000 and under 20,000 ..	1,755	1,565	16,782	937,920	199
20,000 and upwards ..	1,024	2,035	21,894	372,851	5
Total on Privately-owned Land ..	330,718	884,951	1,066,755	17,069,729	232,665
On Crown Land not held in conjunction with privately-owned Land ..	3,482	6,480	9,152	71,787	2,389
In towns and travelling ..	26,805	18,756	16,141	54,453	5,476
Grand Total ..	361,005	910,187	1,092,048	17,195,969	240,530

The information collected disclosed that 66,703 persons holding up to 1,000 acres each of private land occupied in the aggregate 16,164,433 acres of such land, or 50 per cent. of the total area in occupation, as well as 2,438,178 acres of Crown land—a total of 18,602,611 acres. Of the privately-owned land and Crown land held in conjunction therewith, these occupiers controlled 63 per cent. of the total cultivation and 46 per cent. of the total pasture, and possessed 73 per cent. of the horses, 89 per cent. of the dairy cows, 67 per cent. of the other cattle, 91 per cent. of the pigs, and 37 per cent. of the sheep.

Live stock in Australia. In the following statement are given the numbers of horses, cattle, sheep and pigs in the various Australian States at March, 1937.

LIVE STOCK IN THE COMMONWEALTH, 1937.

State.	Horses.	Cattle.	Sheep.	Pigs.
	No.	No.	No.	No.
Victoria	357,158	2,005,759	17,663,103	318,673
New South Wales ..	545,829	3,288,169	53,166,010	390,780
Queensland	441,536	5,950,572	20,011,749	290,855
South Australia	200,870	328,013	7,905,112	85,048
Western Australia ..	155,125	791,470	9,024,758	77,292
Tasmania	30,626	270,035	2,000,000	45,163
Northern Territory ..	35,152	900,535	25,000	555
Federal Capital Territory ..	1,125	9,651	243,669	452
Total	1,767,421	13,544,204	110,039,401	1,208,818

Agriculture in Victoria and Great Britain. The figures relating to agriculture and live stock in Victoria and Great Britain (England, Wales, and Scotland) in 1936 are, for comparative purposes, given in the table which follows :—

AGRICULTURE AND LIVE STOCK IN VICTORIA AND GREAT BRITAIN.

——		Victoria. (1936-37.)	Great Britain. (1935-36.)
Total area	acres	56,245,760	56,208,959
Wheat	bushels	42,844,816	54,992,000
Oats	,,	6,107,885	96,432,000
Barley	,,	2,143,109	32,659,000
Peas	,,	151,608	1,144,000
Potatoes	tons	196,623	3,804,000
Turnips and Swedes	,,	3,942*	11,507,000
Mangolds	,,	8,775	4,756,000
Hay	,,	1,403,049	7,228,000
Horses	No.	357,158	1,012,750
Cattle	,,	2,005,759	7,853,300
Sheep	,,	17,663,103	24,205,420
Pigs	,,	318,673	4,040,180

* Includes beet, carrots, and parsnips.

Distribution of Live Stock.

The next table contains particulars of the distribution of horses, cattle, sheep and pigs on agricultural and pastoral lands in March, 1937.

DISTRIBUTION OF LIVE STOCK, VICTORIA, 1937.

Districts.	Number of—				
	Horses.	Dairy Cattle.	Other Cattle.	Sheep.	Pigs.
Central	63,408	188,912	152,888	1,511,455	51,000
North-Central ..	16,987	41,667	59,257	1,508,290	10,360
Western ..	46,031	251,950	226,991	5,509,522	58,602
Wimmera ..	51,359	26,627	24,257	2,566,857	6,985
Mallee	54,328	26,906	22,987	1,216,862	10,138
Northern ..	68,253	126,750	123,066	2,997,660	55,054
North-Eastern ..	25,584	94,664	201,027	1,303,912	32,268
Gippsland ..	31,208	211,079	226,731	1,048,545	94,266
Total ..	357,158	968,555	1,037,204	17,663,103	318,673

Dairying.

The dairying industry is one of the principal sources of the wealth of the community. The gross value of dairy produce in the season 1936–37 was £13,018,154 as compared with £11,376,604 in 1935–36, £9,368,531 in 1934–35, £7,905,988 in 1933–34, and £9,621,493 in 1932–33. The following table shows the numbers of cowkeepers and cows at the end of, and the total production of butter and cheese in, each of the last five years.

DAIRYING, 1932–33 TO 1936–37.

As at 1st March—	Number of Cow-keepers.	Number of Dairy Cows.	Butter made.*	Cheese made.*
			lb.	lb.
1933	57,871	887,996	144,564,666	9,189,018
1934	58,836	910,187	134,942,177	8,363,233
1935	58,639	951,849	147,651,179	10,095,139
1936	58,259	987,676	148,132,507	10,973,804
1937	57,723	968,555	154,194,197	13,350,124

* Year ended 30th June.

Numbers and Sizes of Dairy Herds.

The following table shows the number of dairy herds in Victoria, grouped, according to size, during each of the the five years, 1933-37.

DAIRY HERDS CONTAINING FIVE COWS OR MORE GROUPED ACCORDING TO SIZE.

As at 1st March—	Number of Herds.							
	5 to 9 cows.	10 to 14 cows.	15 to 19 cows.	20 to 29 cows.	30 to 49 cows.	50 to 99 cows.	100 and over	Total.
1933 ..	11,339	6,468	4,069	6,104	5,487	2,756	477	36,700
1934 ..	11,697	6,742	4,150	6,236	5,802	2,894	513	38,034
1935 ..	11,694	6,438	4,030	6,143	6,134	3,136	553	38,128
1936 ..	11,403	6,274	4,002	5,984	6,473	3,480	614	38,230
1937 ..	11,245	6,053	3,773	5,580	6,315	3,516	641	37,123

The number of farmers with less than five cows was :—21,171 in 1933, 20,802 in 1934, 20,511 in 1935, 20,029 in 1936, and 20,600 in 1937. These were excluded from the foregoing table as they were considered too small to be classed as dairy herds.

Herds containing 30 to 49 cows increased in number from 5,487 in 1933 to 6,315 in 1937, herds of 50 to 99 cows from 2,756 to 3,516, and herds of 100 cows and over from 477 to 641. During the same period the number of cowkeepers with under 5 cows decreased from 21,171 to 20,600.

The Milk Board Act 1936.

This Act extends the powers of the Milk Board by providing that the Board shall, in addition to determining the minimum prices to be paid to owners of dairy farms for milk for sale or distribution in the metropolis, also have power to determine the minimum prices to be paid for such milk to owners of milk depots and—in the case of sales other than sales by retail—to dairymen. A summary of the principal legislative provisions of this Act appears on pages 429 and 430 of the Victorian *Year-Book* for 1935-36.

Butter and Cheese Made.

The following statement shows the quantities of butter and cheese made in factories and on farms in each of the last five years.

Year Ending 30th June—	Butter.			Cheese.		
	In Factories.	On Farms.	Total.	In Factories.	On Farms.	Total.
	lb.	lb.	lb.	lb.	lb.	lb.
1933	139,920,159	4,644,507	144,564,666	9,073,827	115,191	9,189,018
1934	130,379,436	4,562,741	134,942,177	8,170,073	193,160	8,363,233
1935	142,999,641	4,651,538	147,651,179	9,954,668	140,471	10,095,139
1936	143,161,374	4,971,133	148,132,507	10,798,199	175,605	10 973,804
1937	149,322,752	4,871,445	154,194,197	13,040,709	309,415	13,350,124

Exports of Butter and Cheese.

In 1936–37 oversea exports of butter from Victorian ports amounted to 90,717,838 lb., valued at £4,056,443. The quantity shipped to the United Kingdom was 83,510,474. lb., valued at £3,664,218. The quantity of cheese exported overseas amounted to 4,488,183 lb., valued at £153,233.

Cream, Condensed Milk and Casein.

The quantities of concentrated, condensed, powdered milk and casein made, together with quantities of cream sold, during the last five years, were as follows :—

Year Ended 30th June—	Cream Sold by Butter Factories.	Concentrated, Condensed, and Powdered Milk Made.	Casein Made.	Total Quantity of Milk Used for All Purposes.
	1,000 lb.	1,000 lb.	1,000 lb.	1,000 Gallons.
1933	4,396	44,187	1,766	396,716
1934	5,972	41,899	2,573	368,806
1935	7,023	51,391	2,424	403,039
1936	10,214	34,385	3,731	399,742
1937	13,755	46,007	4,334	432,330

Sheep.

The numbers of sheep in Victoria in various years since 1861 are shown in the table on page 446. Sheep are depastured in practically all districts of the State, but are relatively more numerous in the Wimmera, Western and Northern districts. The distribution of all live stock is shown in table on page 449.

Factors such as seasonal conditions, prices of wool, mutton and to a lesser degree wheat, affect the number of sheep in the State in any given year. In an adverse season flocks may be reduced by mortality due to lack of fodder or water, by the increase in the slaughtering of fat stock, by the decrease in lambing or by decreased imports from other States.

In addition to the seasonal movements of sheep from New South Wales for agistment, there is a regular importation of sheep from that State, mainly for slaughtering purposes. The net crossovers—that is the excess of imports over exports—from New South Wales in season 1936–37 were 1,398,636, and the average net imports over the last five seasons were 1,605,460 sheep and lambs.

Flocks of Sheep in Districts.

The following table contains a classification of the flocks of sheep in each district of Victoria as at March, 1936. Sheep travelling on roads or located in cities or towns are excluded. The classification discloses that, although the four groups with sheep under 500 comprise 67·46 per cent. of the owners, the number of sheep in those groups was only 20·54 per cent. of the total sheep in the State.

FLOCKS OF SHEEP IN

Size of Flock.	Total in Victoria.				Districts.			
	Flocks.		Sheep.		Central.		North-Central.	
	No.	Percentage to Total.	No.	Percentage to Total.	Flocks.	Sheep.	Flocks.	Sheep.
					No.	No.	No.	No.
Under 50	4,331	14·77	90,586	0·52	542	12,008	214	5,331
50 and under 100	2,608	8·89	183,551	1·06	351	24,809	220	15,455
100 ,, 250	6,613	22·55	1,088,018	6·25	732	118,993	568	93,281
250 ,, 500	6,233	21·25	2,212,067	12·71	532	186,816	579	205,969
500 ,, 1,000	5,317	18·13	3,662,502	21·05	405	279,445	469	324,250
1,000 ,, 2,000	2,668	9·10	3,589,634	20·63	189	253,744	258	346,557
2,000 ,, 3,500	953	3·25	2,401,769	13·81	66	167,194	86	215,069
3,500 ,, 5,000	256	0·87	1,038,822	5·97	16	65,740	28	111,742
5,000 ,, 7,500	180	0·61	1,074,702	6·18	8	43,387	13	80,742
7,500 ,, 10,000	86	0·29	728,392	4·19	7	61,666	3	25,522
10,000 ,, 15,000	57	0·19	683,954	3·93	5	57,218	4	45,406
15,000 ,, 20,000	17	0·06	292,767	1·68	2	34,266	..	..
20,000 and over ..	12	0·04	352,301	2·02	1	49,739	..	..
Totals	29,331	100·00	17,399,065	100·00	2,856	1,355,025	2,442	1,469,324

Lambing

Seasonal conditions also play a large part in determining the proportion of ewes mated and lambs dropped, and thus a wide variation from the average natural increase may be experienced in any particular season. The following table shows the percentage of lambs marked in each of the five years, 1932 to 1936.

LAMBING PERCENTAGE, 1932 TO 1936.

Year.	Proportion of Lambs Marked to Ewes Mated.
	%
1932	88·2
1933	71·1
1934	82·3
1935	83·4
1936	76·5

VICTORIA AS AT MARCH, 1936.

Districts—*continued.*

Western.		Wimmera.		Mallee.		Northern.		North-Eastern.		Gippsland.	
Flocks.	Sheep.	Flocks.	Sheep.	Flocks	Sheep.	Flocks.	Sheep.	Flocks.	Sheep.	Flocks.	Sheep.
No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1,309	22,703	402	10,385	242	5,990	498	11,489	450	9,760	674	12,920
404	28,107	384	27,110	323	22,746	444	31,663	236	16,734	246	16,927
843	139,884	1,033	170,804	1,164	189,456	1,426	237,360	472	77,129	375	61,111
910	333,601	1,014	354,642	811	281,302	1,486	530,619	580	205,382	321	113,736
1,098	772,687	920	627,985	413	279,456	1,219	831,051	463	321,664	330	225,964
654	895,620	480	634,575	141	181,548	510	687,981	259	353,522	177	236,087
324	816,671	156	402,961	31	75,918	151	378,241	74	183,498	65	162,217
109	439,559	42	138,954	7	28,330	22	92,306	15	61,277	17	70,914
100	602,925	17	99,292	5	28,453	13	78,600	8	49,089	16	92,214
57	482,326	12	100,031	..	..	4	33,313	..	..	3	25,534
38	463,669	2	22,664	..	..	6	73,997	2	21,000	..	..
12	208,743	1	16,110	..	..	1	18,050	..	..	1	15,598
9	245,693	..	..	1	26,557	1	30,312	..	..	..	..
5,867	5,452,188	4,463	2,635,513	3,138	1,119,756	5,781	3,034,982	2,559	1,299,055	2,225	1,033,222

Breeds of Sheep.

Although the principal breed of sheep in Victoria is the "Merino," the percentage of pure Merino sheep is only 39 as compared with 85 in New South Wales. Merino Comebacks, the progeny of Crossbred ewes mated to Merino rams, number 34 per cent., other crossbreeds 24 per cent. and other British and Australasian breeds 3 per cent. of the sheep of the State.

Australasian breeds are the Polwarth and the Corriedale. The Polwarth is a Merino-Lincoln cross (approximately three-quarters Merino and one-quarter Lincoln). It was evolved to meet the conditions of light wool growing localities found to be too wet and cold for the pure merino. The Corriedale was evolved by heavily culling the progeny of Lincoln rams and Merino ewes and by judicious mating over several years. The Corriedale is a dual purpose sheep, being favoured by many breeders both for lamb raising and for wool production.

The actual numbers of each breed of sheep are set out in the following table :—

BREEDS OF SHEEP IN VICTORIA.

Breed of Sheep.	Year (as at 1st March).				
	1932.	1933.	1934.	1935.	1936.
Merino	6,044,998	6,500,372	6,625,544	6,551,084	6,808,054
Polwarth	171,508	181,486	199,155	235,509	244,733
Corriedale ..	64,830	115,323	124,850	145,948	153,698
Border Leicester ..	101,067	96,978	97,554	79,954	60,298
Lincoln	21,090	20,880	20,111	17,447	9,993
Leicester (England)	19,330	19,763	16,361	13,621	8,787
Dorset Horn ..	11,593	15,846	14,770	15,873	17,437
Southdown ..	11,249	12,189	12,861	15,941	19,699
Romney Marsh ..	11,921	14,018	10,704	10,677	8,166
Shropshire ..	7,834	7,207	9,415	6,411	6,038
Other Pure Breeds ..	4,375	5,384	4,490	5,663	5,116
Merino Comebacks ..	5,980,989	6,343,174	6,027,398	5,612,233	5,863,083
Other Crossbreeds ..	3,896,731	4,150,351	3,978,303	4,020,233	4,193,963
Total Sheep (exclusive of those travelling and in cities) ..	16,347,515	17,482,971	17,141,516	16,730,594	17,399,065

Rams, Ewes, &c., in Counties at March, 1937.

The following table sets out the numbers of rams, ewes, wethers and lambs depastured in each county of the State as at March, 1937. Similar information has never been previously collected in Victoria.

RAMS, EWES, ETC., IN EACH COUNTY OF VICTORIA AS AT MARCH, 1937.

County.	One Year Old and Upwards.			Under One Year.	Total Sheep and Lambs.
	Rams.	Ewes.	Wethers.	Lambs.	
	Number.	Number.	Number.	Number.	Number.
Bourke	7,110	232,275	121,362	86,558	447,305
Grant	6,969	384,040	211,551	147,523	750,083
Mornington ..	2,055	117,344	37,469	54,187	211,055
Evelyn	627	34,379	10,344	17,198	62,548
Anglesey	4,457	203,498	186,004	82,274	476,233
Dalhousie	7,105	299,575	120,768	100,445	527,893
Talbot	6,561	293,147	85,983	118,130	503,821
Grenville	7,923	329,973	205,481	127,149	670,526
Polwarth	2,574	86,217	40,774	42,528	172,093
Heytesbury ..	836	26,985	7,643	12,877	48,341
Hampden	11,739	478,345	241,761	189,240	921,085
Ripon	10,060	424,592	296,994	172,753	904,399
Villiers	9,222	444,946	338,384	220,143	1,012,695
Normanby ..	4,800	279,011	277,193	121,722	682,726
Dundas	5,569	339,143	375,953	112,308	832,973
Follett	1,090	59,074	178,501	22,195	260,860
Lowan	8,702	463,896	409,149	146,257	1,028,004
Borung	9,351	511,405	258,765	133,231	912,752
Kara Kara ..	8,995	366,548	142,867	107,069	625,479
Millewa	1,496	66,480	12,307	23,394	103,677
Weeah	1,635	88,211	9,032	19,449	118,327
Karkarooc ..	6,241	344,534	32,970	74,540	458,285
Tatchera	7,735	393,770	36,152	97,551	535,208
Gunbower ..	5,205	244,265	36,366	77,361	363,197
Gladstone	6,844	312,865	81,762	96,617	498,088
Bendigo	8,027	379,599	65,579	126,474	579,679
Rodney	7,841	364,292	48,604	162,780	583,517
Moira	16,311	720,383	70,092	161,360	968,146
Delatite	7,371	365,056	119,627	130,094	622,148
Bogong	4,855	233,254	47,139	72,988	358,236
Benambra	2,738	143,804	76,188	57,110	279,840
Wonnangatta ..	478	19,277	15,670	7,913	43,338
Croajingolong ..	278	20,276	15,268	9,402	45,224
Tambo	1,093	51,367	21,792	26,797	101,049
Dargo	805	48,856	31,013	22,647	103,321
Tanjil	3,013	195,144	113,459	72,887	384,503
Buln Buln ..	3,339	188,899	136,507	85,494	414,239
Total ..	201,050	9,554,725	4,516,473	3,338,645	17,610,893
In Towns and Travelling ..		Not	available		52,210
Grand Total ..	..	..	..	..	17,663,103

Production of Wool.

Statistics of wool production are obtained direct from the growers, from fellmongeries and, in respect of wool exported on skins, from the Customs Department.

The output of wool is stated in the grease as, except in the case of fellmongered wool, scoured weights are not available.

SHEEP AND LAMBS SHORN (IN DISTRICTS) SEASON 1936-37.

District.	Shorn.		Wool Clipped (including Crutchings).		Average.	
	Sheep.	Lambs.	Sheep's.	Lambs'.	Per Sheep.	Per Lamb.
	No.	No.	lb.	lb.	lb.	lb.
Central	1,176,727	237,878	8,739,563	547,636	7·43	2·30
North-Central ..	1,356,474	285,501	9,859,931	605,700	7·27	2·12
Western	4,914,363	1,062,701	37,203,985	2,310,973	7·57	2·17
Wimmera	2,485,448	399,652	19,399,599	874,917	7·81	2·19
Mallee	1,053,346	221,061	8,769,669	520,029	8·33	2·35
Northern	2,705,061	656,389	20,620,847	1,556,478	7·62	2·37
North-Eastern ..	1,102,122	285,506	8,081,781	547,808	7·33	1·92
Gippsland	861,370	212,890	6,319,524	382,946	7·34	1·80
State Totals ..	15,654,911	3,361,578	118,994,899	7,346,487	7·60	2·19

SHEEP SHORN AND WOOL CLIPPED.

Season.	Shorn.		Wool Clipped (including Crutchings).		Average.	
	Sheep.	Lambs.	Sheep's.	Lambs'.	Per Sheep.	Per Lamb.
	No.	No.	lb.	lb.	lb.	lb.
1932-33	14,079,565	3,611,056	114,408,146	8,548,928	8·13	2·37
1933-34	14,591,650	3,392,025	102,263,202	7,499,912	7·01	2·21
1934-35	13,854,421	3,560,123	108,668,252	7,653,639	7·84	2·15
1935-36	14,962,109	3,427,684	117,845,531	7,627,166	7·88	2·23
1936-37	15,654,911	3,361,578	118,994,899	7,346,487	7·60	2·19

WOOL PRODUCTION AND VALUE.

Season.	Clip.	Stripped from and Exported on Skins, etc.	Total Quantity.	Gross Value.	Average Price per lb.
	lb.	lb.	lb.	£	*d.*
1932–33	122,957,074	35,555,119	158,512,193	5,402,514	8·18
1933–34	109,763,114	40,407,011	150,170,125	9,204,057	14·71
1934–35	116,321,891	34,623,993	150,945,884	5,987,948	9·52
1935–36	125,472,697	37,925,199	163,397,896	9,506,557	13·96
1936–37	126,341,386	36,707,124	163,048,510	11,133,757	16·39

The annual collection of statistics is carefully and efficiently carried out by the police. It is expected, however, that the wool clip as recorded is not likely to cover the whole clip, which was shorn some months prior to the collection. After investigation, and examination of the results of investigations elsewhere, it is considered that the quantity not recorded does not exceed 5 per cent. of the Victorian clip.

There is some uncertainty also associated with skin wool. Allowance is made for skins from other States which are exported from Victoria, so that they are not included in Victorian production. The Victorian figures do, however, include skin wool from all sheep and lambs slaughtered in Victoria, even though some of such sheep were brought over from other States for slaughter.

Prices of wool. The following information as to the average prices of wool per lb. which have prevailed during the last three seasons has been obtained from Victorian wool brokers. These prices are not for Victorian wool only, but for wool sold in Victoria. Wool from the Riverina and the south-east of South Australia is included in Victorian sales.

PRICES OF WOOL, 1934–35 TO 1936–37.

Class of Wool.	Average Price per lb. in—		
	1934–35.	1935–36.	1936–37.
GREASY MERINO.	Pence.	Pence.	Pence.
Extra Super (Western District) ..	17 to 19	24 to 26	30 to 33
Super	15 to 17	22 to 24	26 to 29
Good	13 to 15	18 to 20	23 to 25
Average	10 to 12	15 to 16	18 to 20
Wasty and Inferior	7 to 9	10 to 12	12 to 15
Extra Super Lambs	17 to 19	20 to 22	30 to 36
Super Lambs	12 to 14	16 to 18	22 to 26
Good Lambs	9 to 11	11 to 13	18 to 20
Average Lambs	6 to 7	8 to 10	13 to 15
Inferior Lambs	4 to 5	5 to 7	9 to 11
GREASY CROSSBRED.			
Extra Super Comebacks	16 to 18	24 to 26	30 to 32
Super Comebacks	14 to 16	21 to 23	26 to 28
Fine Crossbred	11 to 13	16 to 18	21 to 23
Medium Crossbred	8 to 10	11 to 13	17 to 19
Coarse Crossbred and Lincoln ..	4 to 6	7 to 8	15 to 18
Super Fine Crossbred Lambs ..	10 to 12	14 to 16	18 to 20
Good Crossbred Lambs	7 to 9	10 to 12	16 to 18
Coarse and Lincoln Lambs	5 to 6	7 to 8	12 to 14
SCOURED.			
Extra Super Fleece	26 to 28	32 to 34	42 to 44
Super Fleece	23 to 24	29 to 31	39 to 41
Good Fleece	20 to 22	26 to 28	34 to 36
Average Fleece	16 to 18	20 to 22	30 to 32
RECORD PRICES FOR THE SEASON.			
Greasy Merino Fleece	22¼	29½	36½
„ Comeback Fleece	19¼	26½	31½
„ Merino Lambs	20½	25	43
„ Comeback Lambs	15¾	24¼	32¼
Scoured Fleece	25½	25½	36¼

Prices of Live Stock.

In the subjoined table will be found a statement of the average and of the range of prices of live stock ruling in metropolitan saleyards at Newmarket during the years 1935–36 and 1936–37. The averages stated are the mean of the monthly

prices realized. Prices of live stock vary each year under the influence of seasonal conditions, price of wool, &c. During periods of dry weather, stock are hastened to market and consequently prices decline but, with the advent of relief rains, stock are withheld from market for fattening, breeding, &c., and prices rise.

PRICES OF LIVE STOCK, 1935-36 AND 1936-37.

Stock.	1935-36.									1936-37.								
	Average.			Range.						Average.			Range.					
Horses.	£	s.	d.	£	s.	d.		£	s.	d.	£	s.	d.		£	s.	d.	
Extra heavy draught	43	0	0	40	0	0	to	48	0	0								
Medium draught ..	33	13	4	32	0	0	to	36	0	0								
Delivery cart ..	18	0	0	..	..	..		..	..	..								
Indian Remounts ..	17	2	0	16	0	0	to	20	0	0	Not Available.							
Saddle and harness	9	0	0	..	..	..		..	..	..								
Ponies	9	6	8	8	0	0	to	11	0	0								
Fat Cattle.																		
Bullocks—																		
Extra prime ..	13	17	11	12	7	6	to	16	2	6	14	3	6		12	11	11	to 17 17 6
Prime	11	12	0	10	14	0	to	12	19	4	12	2	7		10	10	8	to 14 12 6
Good	10	1	4	8	18	4	to	11	3	9	10	1	10		8	17	1	to 12 5 10
Good light and handy weights	8	10	5	7	10	0	to	9	10	8	8	6	7		6	15	0	to 10 12 6
Second ..	7	1	4	5	15	0	to	8	5	0	7	7	10		5	19	2	to 9 0 0
Cows—																		
Best	8	3	4	6	14	8	to	9	9	4	8	8	7		7	3	5	to 9 19 3
Others	4	9	1	3	15	7	to	5	4	4	4	10	6		3	6	8	to 5 7 6
Dairy Cattle.																		
Milkers (best) ..	9	16	6	8	1	3	to	12	1	6	10	6	0		7	16	0	to 12 7 6
Springers (best) ..	6	11	6	5	10	6	to	8	2	6	7	7	6		6	2	6	to 9 3 6
Fat Sheep.																		
Crossbred Wethers—																		
Extra prime ..	1	7	1	1	3	2	to	1	12	10	1	10	3		1	3	9	to 1 19 10
Prime	1	4	6	1	0	4	to	1	9	4	1	7	11		1	2	6	to 1 17 2
Good	1	1	8	0	17	6	to	1	5	7	1	4	11		0	19	11	to 1 12 10
Crossbred Ewes—																		
Extra prime ..	1	0	11	0	15	1	to	1	6	7	1	3	1		0	15	9	to 1 12 1
Prime	0	18	0	0	12	7	to	1	3	10	1	0	0		0	14	3	to 1 8 1
Good	0	14	3	0	9	9	to	0	19	9	0	16	2		0	12	4	to 1 3 9
Merino Wethers—																		
Extra prime ..	1	7	4	1	0	9	to	1	11	6	1	9	11		1	2	11	to 1 17 4
Prime	1	2	10	0	16	8	to	1	9	1	1	5	10		0	19	4	to 1 15 1
Good	0	19	4	0	14	1	to	1	5	11	1	2	2		0	16	4	to 1 10 10
Fat Lambs.																		
Extra prime ..	1	4	6	1	2	9	to	1	6	5	1	7	8		1	5	2	to 1 13 3
Prime	1	2	1	1	0	1	to	1	3	11	1	4	7		1	2	0	to 1 8 9
Good	0	19	3	0	17	6	to	1	0	9	1	1	9		0	18	10	to 1 4 10
Pigs.																		
Back Fatters—																		
Extra heavy prime	7	5	11	6	15	0	to	8	8	4	Not Available.							
Prime medium and weighty ..	4	5	5	2	12	7	to	5	10	5	5	5	1		4	5	0	to 6 2 1
Baconers—																		
Medium and heavy	3	0	9	2	16	8	to	3	5	6	3	10	5		3	0	4	to 3 17 1
Light	2	7	6	2	3	9	to	2	11	10	2	15	2		2	8	5	to 2 19 5
Porkers ..	1	14	5	1	10	2	to	1	19	7	1	17	8		1	15	0	to 2 0 0

Stock Slaughtered. The following table shows the number of slaughtering establishments and the total number of stock slaughtered in the State during the five years, 1933–37.

STOCK SLAUGHTERED, 1933 TO 1937.

Kind of Stock.	Stock Slaughtered in Establishments and on Farms and Stations.				
	Year ended June—				
	1933.	1934.	1935.	1936.	1937.
	No.	No.	No.	No.	No.
Sheep	3,552,754	3,941,401	3,377,398	3,106,757	3,087,809
Lambs	3,586,695	3,831,888	4,268,672	4,584,731	4,826,624
Bullocks	146,391	152,052	181,087	183,140	208,569
Cows	109,991	118,015	150,868	200,779	216,073
Young Cattle ..	40,195	54,688	59,294	80,272	86,950
Calves	131,067	147,140	201,999	310,204	393,297
Pigs	426,022	419,725	414,739	495,499	568,477
Number of Slaughter-houses	789	788	774	779	769

Frozen Mutton and Lamb Exported. The importance of the mutton and lamb export trade to sheep owners is indicated by the export figures for the years 1933 to 1937 as shown in the statement hereunder.

Seasonal influences are principally responsible for fluctuations in the various years.

FROZEN MUTTON AND LAMB EXPORTED FROM VICTORIAN PORTS.

Year ended 30th June—	Carcasses Exported.					
	Mutton.			Lamb.		
	Number.	Average Weight.	Value.	Number.	Average Weight.	Value
		lb.	£		lb.	£
1933.. ..	316,439	45	197,056	2,414,848	33	1,521,078
1934.. ..	457,846	42	290,242	2,387,779	30	1,677,254
1935.. ..	439,179	44	297,002	2,714,441	30	2,134,761
1936.. ..	312,808	43	224,243	2,921,902	33	2,489,952
1937.. ..	367,622	44	283,521	3,159,806	32	2,803,421

Cattle. The cattle industry of Victoria has always been one of the more important primary industries in this State, despite the gradual increase in the areas that have been given up to dairy

farming, sheep-raising, and cultivation. This has been due mainly to the considerable improvement in methods of pasture management, including the adoption of top-dressing. The vigilant inspection of stock and the rigid quarantine of stock imported from oversea have kept herds in Victoria free from many forms of contagious diseases and animal pests with which stock in other countries are afflicted.

From the table on page 449 it will be seen that, in 1937, beef cattle were scattered fairly generally throughout the State, and that their number exceeded that of dairy cattle by 68,649.

Silage. Ensilage is an economical and safe method of conserving fodder, moreover it is presented in a succulent form which is relished by stock during dry periods. Expensive precautions against damage by fire, rodents and stock, required for other fodders, are not necessary in the case of silage.

The following table gives particulars of the silage made in Victoria during the seasons 1934–35 to 1936–37 :—

SILAGE IN VICTORIA, 1934–35 TO 1936–37.

Season.	Farms on which Silage made.	Silage made.	Districts in which made.							
			Central.	North Central.	Western.	Wimmera.	Mallee.	Northern.	North Eastern.	Gippsland.
	No.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1934–35..	369	22,145	6,932	258	1,818	50	212	1,172	5,422	6,281
1935–36..	326	22,346	7,115	262	788	233	55	878	5,519	7,496
1936–37..	549	32,902	11,635	886	2,085	281	150	1,022	4,617	12,226

Stock Medicines Act 1937. The object of this Act, which came into operation on 1st July, 1938, is to give protection to the purchasers of stock medicines. Every wholesale dealer of such medicines is required to apply annually for the registration thereof to the Director of Agriculture. Every application must set out *inter alia*—

1. The place of manufacture and the name of the manufacturer of the medicine.

2. A chemical analysis of the prescription used stating all the constituent parts and their respective proportions used.

3. Full directions for its use and application and a statement of the disease or injuries which it is claimed to prevent, cure, or alleviate.

The Director of Agriculture shall submit each application to the Stock Medicines Board, constituted under this Act, for its report and recommendation thereon.

The Act defines the meaning of "Stock Medicine," prescribes the powers and duties of inspectors and the penalties which may be imposed upon persons contravening the provisions of the Act.

Apiculture. Prior to the season 1936, the statistics of honey and beeswax were based on returns received from apiarists who were permanent occupiers of holdings of one acre and upwards. As a consequence, production has been understated because of the exclusion of (*a*) hives on areas of less than one acre, and (*b*) travelling beekeepers who were not occupiers of rural holdings.

For the seasons 1936 and 1937, returns from all beekeepers were collected, the particulars of which are given in the following table :—

BEE-HIVES, HONEY AND BEESWAX, 1935-36 and 1936–37.

Season ended May—	Bee-keepers.	Hives.	Production.		Gross Value.	
			Honey	Beeswax.	Honey.	Beeswax.
	No.	No.	lb.	lb.	£	£
1936	3,330	99,650	5,901,463	61,849	92,210	4,123
1937	3,422	99,618	3,439,262	40,612	53,738	2,707

State expenditure on destruction of vermin and noxious weeds. Active operations for the destruction of vermin and noxious weeds on Crown lands were first undertaken by the Government in 1880. Subsidies to Shire Councils for the destruction of wild animals are made from revenue, and advances to municipalities and farmers for the purchase of wire netting from Loan Funds. The following are the amounts spent during the last five years :—

EXPENDITURE ON DESTRUCTION OF VERMIN AND NOXIOUS WEEDS, 1932–33 TO 1936–37.

Year.	From Revenue.	Wire Netting Advances from Loan Funds.
	£	£
1932–33	69,561	52,352
1933–34	68,142	37,228
1934–35	86,359	18,384
1935–36	98,135	19,444
1936–37	95,957	19,585

Poultry Census.

The following table shows the number of poultry owners and of poultry in Victoria, as ascertained in connexion with the Census for the years 1881, 1891, 1901, 1911, and 1933.

POULTRY OWNERS AND POULTRY.

Census.	Poultry owners.	Fowls.	Ducks.	Geese.	Turkeys.
	No.	No.	No.	No.	No.
1881	97,152	2,332,529	181,698	92,654	153,078
1891	142,797	3,487,989	303,520	89,145	216,440
1901	132,419	3,619,938	257,204	76,853	209,823
1911	144,162	3,855,538	288,413	59,851	190,077
1933	155,672	5,496,969	292,882	39,283	113,966

NOTE.—Details of the classification of poultry for each statistical district of the State are obtainable from the Government Statist.

The Census of 1933 disclose that there had been an increase in the number of poultry owners since 1911, that there were considerably more fowls than at that period, that ducks had slightly increased, and that both geese and turkeys had decreased in numbers.

Of the number of fowls in the State, 43 per cent. was in the Central district, which consists of the counties of Bourke, Grant, Mornington, and Evelyn, and of the turkeys 33 per cent. was in the Northern district.

In addition to the poultry enumerated in the table, there were, at the date of the 1933 census, 1,267 guinea fowls, 322 pea fowls, and 411 pheasants.

Wholesale and Retail Prices of principal products.

The following table gives the yearly average (mean of monthly averages) of the Melbourne wholesale prices of the principal agricultural, dairying, and pastoral food products for the years 1932–33, 1933–34, 1934–35, 1935–36, and 1936–37.

WHOLESALE PRICES—YEAR ENDING JUNE.

		1932–33.	1933–34.	1934–35.	1935–36.	1936–37.
Agricultural—		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Wheat ..	per bushel	0 2 11¼	0 2 7⅜	0 2 11	0 3 5⅜	0 4 11¼
Barley—						
English	,,	0 2 8⅞	0 2 8⅛	0 2 11	0 2 10½	0 4 0½
Cape ..	,,	0 2 3⅞	0 2 3⅜	0 2 5	0 2 4⅝	0 3 7
Oats Milling	,,	0 1 11½	0 2 3⅞	0 2 3½	0 2 2⅜	0 2 7¼
Maize	,,	0 4 11½	0 4 1	0 3 9⅜	0 4 10⅞	0 5 6¼
Peas ..	,,	0 5 8½	0 3 11⅞	0 4 2⅜	0 4 3	0 5 2⅜
Bran	per ton	4 18 0	4 9 0	4 14 0	5 9 0	6 0 11
Pollard	,,	5 3 0	4 16 0	4 19 8	5 16 7	6 12 11
Flour (first quality)	,,	8 4 0	7 12 0	8 3 5*	9 3 5*	12 9 6
Oatmeal (bulk) ..	,,	17 5 0	19 10 0	19 10 0	18 15 1	18 13 10
Potatoes ..	,,	3 13 0	4 2 0	8 5 6	8 8 0	6 15 2
Onions	,,	11 15 0	2 11 0	7 3 0	7 17 10	12 10 3

* Price quoted does not include tax of £2 12s. 6d. payable from 7th January, 1935 to 25th February, 1936.

WHOLESALE PRICES—YEAR ENDING JUNE—*continued.*

	1932–33.	1933–34.	1934–35.	1935–36.	1936–37.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Butchers' Meat—					
Beef, prime per 100 lb.	1 6 9	1 10 6	1 5 11	1 6 10	1 9 3½
Mutton .. .. per lb.	0 0 2½	0 0 3½	0 0 3 3/16	0 0 3 13/16	0 0 3¾
Pork .. .. ,,	0 0 5½	0 0 6½	0 0 6 11/16	0 0 6¼	0 0 6¾
Veal .. .. ,,	0 0 3½	0 0 3	0 0 2 11/16	0 0 2 13/16	0 0 3¼
Lamb .. .. ,,	0 0 4	0 0 5⅜	0 0 5 13/16	0 0 6 5/16	0 0 6⅝
Dairy and Farmyard Produce—					
Butter .. .. per lb.	0 1 1¼	0 1 0½	0 1 3	0 1 3	0 1 3
Bacon .. .. ,,	0 0 10	0 0 11⅝	0 0 11 7/8	0 0 10⅝	0 0 11¾
Ham .. .. ,,	0 1 2½	0 1 1½	0 1 3 3/16	0 1 2 5/16	0 1 3¼
Cheese (matured) ,,	0 1 0¾	0 0 11½	0 0 11¾	0 1 1 3/16	0 1 2
Honey .. .. ,,	0 0 4¾	0 0 4½	0 0 4 15/16	0 0 3 13/16	0 0 3¾
Eggs .. .. per doz.	0 1 0¾	0 1 0⅝	0 1 0 13/16	0 1 1⅛	0 1 3

The average Melbourne retail prices of the various agricultural, dairying and pastoral products shown in the following table are based on the prices quoted by retail shops in the metropolis in returns furnished to the Commonwealth Statistician.

The annual averages represent the mean of the monthly prices during each year.

RETAIL PRICES—YEAR ENDING JUNE.

	1932–33.	1933–34.	1934–35.	1935–36.	1936–37.
	s. d.	s. d.	s. d.	s. d.	s. d.
Agricultural—					
Flour .. per 25 lb.	2 8½	3 2½	3 2	3 6	(2 lb.) 0 4
Bread .. per 4-lb. loaf	0 8	0 8	0 8½	0 9½	0 10½
Oatmeal .. .. per lb.	0 2¾	0 2½	0 2¾	0 2½	0 2¾
Potatoes .. per 14 lb.	0 8¾	0 9½	1 4¾	1 5¾	(7 lb.) 0 7¾
Onions .. .. per lb.	0 2½	0 0¾	0 1½	0 1½	0 2¼
Butchers' Meat—					
Beef .. .. per lb.	0 6¾	0 7	0 6½	0 6¾	0 7¼
Steak, rump .. ,,	0 11¾	1 1½	1 0¾	1 0½	1 1
Mutton .. .. ,,	0 4½	0 5½	0 5½	0 5½	0 6
Mutton chops .. ,,	0 6	0 6½	0 6¾	0 7½	0 8
Pork .. .. ,,	0 8½	0 9½	0 9¼	0 9¾	0 9¾
Dairy and Farmyard Produce—					
Butter .. .. per lb.	1 3½	1 2¾	1 5¼	1 5¼	1 5¼
Cheese (matured) .. ,,	1 5	1 4	1 3	1 4	1 5
Milk .. ..per quart	0 6	0 5¾	0 6	0 6½	0 6½
Bacon (rashers) .. per lb.	1 2¼	1 3¼	1 3¾	1 3½	1 5
Ham (uncooked) .. ,,	1 3	1 4	1 4½	1 4½	..
Eggs .. .. per doz.	1 3½	1 2½	1 3½	1 3½	1 6½

Establishment of Marketing Boards.

A summary of the principal legislative provisions of the *Marketing of Primary Products Act* 1935 appears on pages 446 to 448 of the *Victorian Year-Book* for 1934–35.

Pursuant to such Act, Marketing Boards have been constituted for onions, chicory, maize and eggs and egg pulp.

Frozen rabbits, &c., exported.

Large quantities of frozen rabbits and hares and of rabbit and hare skins are exported annually to oversea countries, the numbers and values for each of the past five years being as follows :—

RABBITS AND HARES AND RABBIT AND HARE SKINS EXPORTED OVERSEA, 1932-33 TO 1936-37.

Year ended 30th June—	Frozen Rabbits and Hares.		Rabbit and Hare Skins.	
	Quantity.	Value.	Quantity.	Value.
	pairs.	£	lb.	£
1933	2,945,707	170,899	2,874,945	127,598
1934	2,719,305	124,196	3,621,047	261,761
1935	4,297,934	192,104	3,157,799	236,199
1936	2,180,524	99,495	3,856,069	556,942
1937	1,340,572	58,331	2,972,466	573,354

Rabbits, &c., sold at Melbourne Fish Market.

The quantities of rabbits, hares, and wild-fowl sold at the Melbourne Fish Market in each of the past five years were as shown in the following statement :—

RABBITS, HARES, AND WILD-FOWL SOLD AT THE MELBOURNE FISH MARKET, 1932-33 TO 1936-37.

Year ended 30th June—	Rabbits and Hares.	Wild-fowl.
	pairs.	brace.
1933	933,634	3,240
1934	954,008	3,354
1935	1,007,952	1,776
1936	744,584	..
1937	498,888	2,316

FISHERIES.

Numbers of men and boats engaged in fishing.

The numbers of men and boats engaged in the fishing industry at the different fishing stations throughout the State are given in the following table for the year 1936-37 :—

VICTORIAN FISHERIES—MEN AND BOATS EMPLOYED, 1936-37.

Fishing Stations.	Number of Men.	Boats.		Value of Nets and other Plant.
		Number.	Value.	
			£	£
Anderson's Inlet (Inverloch)	15	9	328	222
Apollo Bay	34	13	1,144	273
Barwon Heads and Ocean Grove ..	10	6	856	115
Brighton	8	5	138	52
Corner Inlet, Welshpool, Toora, and Port Franklin	68	44	5,730	2,855
Dromana and Rosebud	23	14	1,180	167
Frankston	16	10	389	287
Geelong	101	27	3,013	1,036
Gippsland Lakes	152	86	8,228	3,467
Kerang	10	6	28	101
Lake Boga	1	1	4	10
Lorne	32	15	2,315	205
Mentone	4	1	20	50
Mordialloc, Chelsea, and Carrum ..	87	38	2,675	1,302
Mornington	32	24	1,410	466
Portarlington and St. Leonards ..	61	38	4,096	1,090
Portland	40	27	5,174	431
Port Albert	41	24	3,250	848
Port Campbell	2	2	130	10
Port Fairy	63	36	9,465	788
Port Melbourne	73	22	1,375	632
Queenscliff	88	56	10,113	1,619
Sandringham and Black Rock	27	13	443	197
Sorrento, Portsea, and Rye	31	30	2,352	437
St. Kilda	36	10	314	202
Torquay	11	6	450	40
Warrnambool	13	6	375	98
Werribee	19	5	370	124
Waranga Basin	2	1	10	5
Western Port (Cowes, Hastings, Grantville, Flinders, San Remo, and Tooradin)	130	94	11,284	2,386
Williamstown and Altona	118	38	2,013	693
Wonthaggi	12	4	300	90
Total	1,360	711	78,972	20,298

Melbourne Fish Market. The quantities and values of fish sold in the Melbourne Fish Market during each of the years 1935-36 and 1936-37 were as shown in the next table :—

FISH SOLD IN THE MELBOURNE FISH MARKET, 1935–36 AND 1936–37.

	1935–36.		1936–7.	
	Quantity.	Value.	Quantity.	Value.
		£		£
Fresh Fish (Victorian) lb.	12,117,440	176,713	12,609,615	197,025
Crayfish .. .. doz.	35,634	30,289	38,712	32,702
Imported Fish (fresh or frozen) .. lb.	3,215,120	117,505	2,756,076	101,132
Oysters .. .. bags	12,714	28,230	11,794	27,341
Total	..	352,737	..	358,200

In addition to the above, 1,008 lb. of smoked fish and 30,500 lb. of prawns were sold in this market in 1936–37.

Victorian fish sold. The quantity and value of fish caught in Victorian waters and sold in the Melbourne and Ballarat markets and elsewhere in 1936–37 were as follows :—

VICTORIAN FISH SOLD IN 1936–37.

Markets.	Quantity.		Value.	
	Fish.	Crayfish.	Fish.	Crayfish.
	lb.	doz.	£	£
Melbourne	12,609,615	11,301	197,025	9,547
Ballarat	381,306	584	6,025	493
Other towns in Victoria ..	47,668	434	753	366
Total	13,038,589	12,319	203,803	10,406

Fish Imported. In connexion with this subject, the quantities and values of the different classes of fish imported are of interest. Particulars of imports from oversea countries in each of the past two years are given in the following statement :—

FISH IMPORTED, 1935–36 AND 1936–37.

		1935–36.		1936–37.	
		Quantity.	Value.	Quantity.	Value.
Fish—			£		£
Fresh or Frozen	lb.	2,549,491	57,271	2,493,575	64,163
Smoked or Dried (not Salted)	„	73,437	1,779	57,732	1,546
Oysters in the Shell ..	cwt.	4,683	2,728	2,349	1,172
Potted or Concentrated, &c.	lb.	141,848	13,568	191,657	15,091
Preserved in tins, &c. ..	„	6,518,162	184,288	7,862,528	222,164
N.E.I.	cwt.	1,759	3,053	1,815	2,886
Total		..	262,687	..	307,022

Of the 1936–37 oversea imports of fish preserved in tins, 5,364,486 lb. came from Canada, 945,863 lb. from the United Kingdom, and 864,495 lb. from Norway.

MINING.

The supervision of mining and the inspection of mines are regulated by Act of Parliament. Authority for all mining operations, whether on Crown or private lands, must first be obtained in the prescribed manner.

Miners' Rights. The taking out of a miner's right entitles the holder to prospect for gold on Crown lands. The right may be had for any number of years not exceeding fifteen on payment of a fee at the rate of 2s. 6d. per annum. The holder is entitled to take possession for mining purposes of a defined parcel of Crown lands which is called a "claim." "Claims" may also be taken up under certain conditions on private land. The revenue in 1936–37 from miners' rights was £768 8s. 6d.

Mining Leases. Leases of Crown land and of private land for the purpose of mining for gold are granted for a term not exceeding fifteen years at a yearly rental of 2s. 6d. per acre, except for land that was alienated before 29th December, 1884, where the rental is 6d. per acre. For mining leases of land to be worked by means of dredging or hydraulic sluicing, the yearly rental is 5s. per acre. Other mineral and coal-mining leases are also issued at varying rates. The revenue from these sources in 1936–37 was £13,550 14s. 3d.

Petroleum Leases and Licenses. Under the *Mines (Petroleum) Act* 1935 which came into operation on the 26th February, 1936, petroleum mineral leases of not more than 640 acres and petroleum prospecting licences covering a maximum area of 16 square miles are granted, over Crown lands and land alienated since 1st March, 1892, at yearly rentals of 6d. and 1d. per acre, respectively. The revenue from these two sources in 1936–37 was £878 2s. 8d.

Area occupied for Mining. The area of Crown and private lands under occupation for mining purposes on 31st December, 1936, was 217,204 acres. The subjoined table shows the area being worked for different minerals :—

AREA UNDER OCCUPATION FOR MINING PURPOSES, 31ST DECEMBER, 1936.

(Crown Land and Private Land.)

Nature of Mineral, &c.	Area.	Nature of Mineral, &c.	Area.
	Acres.		Acres.
Gold	155,944	Kaolin and Quartz Grit ..	10
Coal (black)*	9,754	Limestone	24
Coal (brown)†	3,288	Magnesite	114
Coal (black and brown) ..	100	Marble	6
Antimony and Gold ..	28	Mineral Water and Gas ..	1
Aluminous Ore (including Bauxite)	44	Oil§	44,755
Bluestone	18	Oxides	10
Calcite	5	Sand	16
Cement Gravel	6	Selwynite	14
Clay	52	Tin	141
Clay and Schist	5	Tin and Gold	74
Copper and platinum ..	115	Tailings Licences	1,829
Granite	16	Water Right Licences ..	530
Gypsum	206	Wolfram	58
Kaolin	21		
Kaolin and Gold	20	Total	217,204

* Includes State Coal Mine Area.
† Includes State Electricity Commission Area.
§ Includes Petroleum Prospecting Licences, 42,642 acres.

Certain gold mining leases include the right to mine for other minerals.

Certain mineral leases include the right to mine for gold.

Mining development. From 1st July, 1899, to 30th June, 1937, in addition to the annual expenditure of which a statement is appended, portions of surplus revenues of past years amounting to £85,000 were expended or advanced for developmental purposes. For the same period, £520,421 has been allocated from loan receipts and expended on mining development. Apart from £249,399 expended on the State Coal Mine during the years 1909 to 1925, no loan money has been allotted for development for 31 years.

STATE EXPENDITURE AND REVENUE CONNECTED WITH MINING, 1932–33 TO 1936–37.

Item.	Expenditure from Consolidated Revenue.				
	1932–33.	1933–34.	1934–35.	1935–36.	1936–37.
EXPENDITURE.	£	£	£	£	£
Mines Department	18,296	19,853	22,546	23,420	25,047
State Coal Mine	283,197	280,932	324,840	321,818	295,940
Boring for Gold, Coal, Oil, &c. ..	562	505	453	1,083	3,033
Testing plants	5,498	11,059	10,088	10,986	10,922
Geological and underground surveys of mines	1,430	1,327	1,431	1,392	1,446
Mining Development	612	550	547	617	615
Miscellaneous	1,092	1,030	1,183	1,184	2,073
Total	310,687	315,256	361,088	360,500	339,076
REVENUE.					
State Coal Mine	228,775	209,188	242,514	229,428	159,945
All other	22,945	23,705	26,961	34,698	28,321
Total	251,720	232,893	269,475	264,126	188,266

The advances from loan moneys and revenue to mining companies to 30th June, 1937, for the development of mining, totalled £285,705. Between 1st July, 1929, and 30th June, 1937, an additional amount of £235,268 has been expended from Unemployment Relief Funds.

Total mineral production.

The mineral production of the State (excluding salt and stone raised in quarries) is summarized in the subjoined statement, which contains particulars of the recorded production of all metals and minerals up to the end of the year 1936 :—

TOTAL MINERAL PRODUCTION TO 31ST DECEMBER, 1936.

Metals and Minerals.	Recorded during 1936.		Total Recorded to end of 1936.	
	Quantity.	Value.	Quantity.	Value.
	Fine Oz.	£	Fine Oz.	£
Gold	117,596	1,018,670	71,773,890	306,516,670
Silver	7,964*	525	1,519,279	233,026
Platinum	..	..	311	1,671
Diamonds	..	..	..	128
Sapphires, &c. ..	..	..	..	630
	Tons (2,240 lb.)		Tons (2,240 lb.)	
Coal, black	426,725	253,835	17,387,059	13,360,074
„ brown	3,044,897	323,914	24,603,718	3,064,004
Ore—copper	..	..	18,740	218,620
„ tin	85	14,750	17,317	1,013,019
„ antimony† ..	194	1,866	104,481	614,214
„ silver-lead ..	..	..	804	5,992
„ iron	..	..	5,434	12,540
„ manganese ..	..	..	422	2,009
Wolfram	..	..	118	11,785
Gypsum	7,461	2,338	184,057	110,732
Magnesite	216	821	2,708	8,807
Kaolin	5,186	5,144	40,261	73,132
Diatomaceous earth ..	104	429	58,043	340,305
Pigment clays ..	..	..	4,496	5,503
Phosphate rock ..	..	..	15,781	16,704
Molybdenite†	..	..	868	30,911
Fluorspar	..	..	623	1,888
Jarosite (Red Oxide) ..	..	..	109	1,359
Bauxite	740	617	8,374	10,535
Alumina	..	..	400	50
	Gallons.		Gallons.	
Oil (crude)	3,783	94	90,931	2,272
Total ..	..	1,623,003	..	325,656,580

* Extracted from gold at the Melbourne Mint. † Concentrates.

NOTE.—The value of gold as shown above is based on the average value of Victorian gold received at the Melbourne Mint. Commencing with 1931 the value is in Australian currency. During the years 1919 to 1924 gold producers received approximately £528,500 (not included above) by way of export premium.

Gold production in Victoria. The quantities of gold produced in Victoria in different periods are shown in the next table :—

GOLD PRODUCTION IN VICTORIA, 1851 TO 1936.

Period.	Quantity (Gross ozs.). *	Period.	Quantity (Fine ozs.).
1851–60	23,334,263	1927	38,538
1861–70	16,276,566	1928	33,917
1871–80	10,156,297	1929	26,275
1881–90	7,103,448	1930	24,119
1891–1900 ..	7,476,038	1931	43,637
1901–10	7,095,061	1932	47,745
1911–15	2,161,349	1933	58,183
1916–20	905,561	1934	70,196
1921–25	421,250	1935	87,609
1926	49,078	1936	117,596

* Gross ozs. 1851–1900.

From 1906 until 1930 the yield of gold continued to decrease, that for 1930 being the lowest since 1851. Since 1930, when both the State and Commonwealth Governments undertook a campaign to encourage prospecting and mining, particularly amongst the unemployed, there has been a gradual increase in the production of gold throughout the State. A steady increase in the world price of gold and the benefit of the Australian rate of exchange on London have further stimulated the mining industry, the production for the year 1936 showing a marked increase over the preceding year, and being the highest since 1923.

The two main headings under which financial assistance is rendered to mining parties and companies are, (*a*) grants to small parties which are paid to each member at the rate of £1 per week, and (*b*) loans to approved mining companies and syndicates.

The yields in fine ounces in the other principal gold-producing States in 1936 were 846,208 ounces in Western Australia, 121,174 ounces in Queensland, and 60,739 ounces in New South Wales, as compared with 117,596 ounces produced in Victoria.

The total production of the Commonwealth in fine ounces was 468,131 in 1930, 595,213 in 1931, 713,882 in 1932, 830,332 in 1933, 887,490 in 1934, 914,736 in 1935, and 1,178,581 in 1936.

The total production of gold in the world in fine ounces, as shown in the United States Mint Report, was 20,903,736 in 1930, 22,284,290 in 1931, 24,098,676 in 1932, 25,400,295 in 1933, 27,372,374 in 1934, 29,999,245 in 1935, and 32,960,158 in 1936.

Mining district gold yields.

The yield of gold (given in gross ounces) for 1935 and 1936 in each mining district of the State, as estimated by the mining registrars, is shown in the following table :—

DISTRICT YIELDS OF GOLD (ALLUVIAL AND QUARTZ) 1935 AND 1936.

Mining District.	1935.			1936.		
	Alluvial.	Quartz.	Total.	Alluvial.	Quartz.	Total.
	oz.	oz.	oz. (gross)	oz.	oz.	oz. (gross)
Ararat and Stawell ..	616	809	1,425	1,036	662	1,698
Ballarat	6,418	13,609	20,027	6,006	21,020	27,026
Beechworth ..	12,754	3,888	16,642	13,408	10,654	24,062
Bendigo	4,609	30,308	34,917	7,196	32,178	39,374
Castlemaine ..	6,340	8,559	14,899	11,543	8,290	19,833
Gippsland	1,433	4,832	6,265	1,556	6,590	8,146
Maryborough ..	3,582	3,221	6,803	5,630	3,037	8,667
Total	35,752	65,226	100,978	46,375	82,431	128,806

Government batteries, cyanidation, and dredging and sluicing.

Particulars relating to the operations of Government batteries, all cyanide works and dredging and sluicing plants for the six years 1931 to 1936 are as follows :—

GOVERNMENT BATTERIES, CYANIDATION, AND DREDGING AND SLUICING, 1931 TO 1936.

Year.	Government Batteries.			Cyanidation.			Dredging and Sluicing.		
	Number of Batteries.	Quantity of Ore Treated.	Yield of Gold.	Number of Plants.	Quantity of Tailings Treated.	Yield of Gold.	Number of Plants.	Quantity of Material Treated.	Yield of Gold.
		tons.	oz.		tons.	oz.		cub. yds.	oz.
1931 ..	33	6,155	3,293	14	8,933	807	7	182,306	1,277
1932 ..	34	15,849	5,737	26	39,317	2,060	8	341,486	1,164
1933 ..	34	17,394	6,397	32	63,565	3,550	8	720,441	1,937
1934 ..	34	17,721	10,088	86	421,104	14,842	12	1,509,756	4,462
1935 ..	34	18,070	10,298	121	630,318	22,460	13	2,328,859	9,343
1936 ..	32	16,659	8,547	141	794,640	28,565	23	3,198,883	12,544

The first Government battery was erected in 1897. Since that date, Government batteries have crushed 173,699 tons of ore for 103,089 ounces of gold.

Up to the end of 1936, 17,990,012 tons of tailings had been treated by the cyanide and other processes, and 1,358,979 ounces of gold had been won therefrom.

Since the inception of dredge mining, 1,934,553 ounces of gold have been won by this system.

COAL MINING.

Black Coal. Bituminous coal is found in three main areas in the southern portion of the State, viz., the Wannon, the Otway and South Gippsland. The Wannon area is comparatively unprospected, owing to almost the whole of the land having been sold. In the Otway area bores have been sunk without disclosing seams of payable thickness. In South Gippsland, seams of payable thickness are found within a belt 50 miles long by 10 miles wide, running north-east from Kilcunda to Morwell, and coal mining is being carried on in such belt at Wonthaggi, Kilcunda, Outtrim, Jumbunna, and Korumburra. To the end of 1936, 17,387,059 tons, valued at £13,360,074, had been produced, the production for 1936 being 426,725 tons, valued at £253,835 at the mine. The total resources in Gippsland are estimated at nearly 40,000,000 tons.

State Coal Mine. Most of the coal is produced at the State Coal Mine at Wonthaggi on the Powlett River. This mine was opened in November 1909 and, in June 1911, control was transferred to the Railways Commissioners. The area reserved for mining is about 12 square miles. The total output to the end of 1936 was 12,047,335 tons, valued at £9,872,906. The hitherto undeveloped portion of this mining field known as the Kirrak Area, consisting of some 956 acres, is now being opened up, its estimated tonnage reserves being 3,366,000 tons. The total reserves within the State Mine area available for extraction at 30th June 1937, were estimated at 10,312,000 tons. During 1936, 355,605 tons, valued at £200,027, were produced. The average number of men employed at the mine throughout the year was 1,128.

Brown Coal. The brown coal beds of Victoria have a proven area of 180 square miles, 58 square miles being situated at Morwell, 50 square miles at Stradbroke and Rosedale, 16 square miles at Alberton and 50 square miles at Altona and Werribee. The total deposits in the State are estimated at 37,000 million tons, of which 27,000 million tons are in the Morwell and in the Stradbroke and Rosedale regions (*vide* "The Coal Resources of Australia" by the Standards Association of Australia). The quantity which may be considered readily exploitable has been estimated by the Government Geologist at between 10,000 million and 11,000 million tons. An area of approximately 30 square miles on the south side of the Latrobe River at Yallourn (Morwell) contains between 5,000 million and 6,000 million tons workable by open-cut mining, all of which is within 6 miles of the power house of the Electricity Commission. At Morwell 780 feet of coal were passed through, in a bore 1,010 feet deep. Coal is being recovered at Yallourn from an open cut the face of which shows an average of slightly more than 30 feet of overburden covering 200 feet of coal. The total output of brown coal in the State to the end of 1936 was 24,603,718 tons, valued at £3,064,004, all of which, with the exception of 878,000 tons, has been produced since 1924. The output in 1936 was 3,044,897 tons valued at £323,914.

The *State Electricity Commission* began to utilize the deposits at Yallourn in 1924, the first generator having been brought into operation on the 15th June, and the briquetting plant in November of that year. Up to the end of June, 1936, 22,332,588 tons had been excavated, the output in 1935–36 being 2,988,430 tons, of which 1,584,858 tons went to the power house and 1,403,572 tons to the briquetting factory. The production of briquettes in 1935–36 was 357,601 tons, 3.92 tons of coal being used to produce 1 ton of briquettes. Up to the end of June, 1936, the total output of briquettes was 2,480,574 tons.

Further details of the activities controlled by the State Electricity Commission will be found on page 501.

Production of black coal, brown coal, and briquettes.

The average annual production and value per ton of black and brown coal, and the production of briquettes up to the end of 1936 are given in the following table :—

COAL PRODUCTION AND VALUE PER TON.

Period.	Black Coal.		Brown Coal.		
	Annual Production.	Value per Ton at Pit's Mouth.	Annual Production.	Cost of Production per Ton at Mine.	Briquettes—Annual Production.
	tons.	*s. d.*	tons.	*s. d.*	tons.
Prior to 1892	77,914	18 8			
1892–1900 ..	184,517*	9 11			
1901–10 ..	168,548*	11 8	81,748†	6 10	..
1911–15 ..	608,512*	9 2			
1916–20 ..	437,833*	15 11	76,514*	6 9	..
1921–25 ..	520,705*	22 8	258,094*	4 9	77,945‡
1926 ..	591,001	22 3	957,935	3 11	95,477
1927 ..	684,245	22 4	1,455,482	3 0	121,644
1928 ..	658,323	22 2	1,591,858	2 6	131,349
1929 ..	703,828	23 1	1,741,176	2 1	146,548
1930 ..	703,487	23 0	1,831,507	1 11	180,905
1931 ..	571,342	12 8	2,194,452	2 3	290,558
1932 ..	432,353	12 9	2,612,512	2 1	319,979
1933 ..	523,000	12 7	2,580,060	2 5	310,767
1934 ..	356,958	12 1	2,617,534	2 0	316,594
1935 ..	476,495	11 10	2,221,515	2 3	317,200
1936 ..	426,725	11 11	3,044,897	2 2	355,088

* Average annual production. † Total production to 1916. ‡ 1,392 tons in 1924, 76,553 tons in 1925.

The quantities of coal which were produced in the other States in 1936 were as follows :—New South Wales, 9,199,466 tons ; Queensland, 1,046,879 tons ; Western Australia, 565,075 tons ; and Tasmania, 132,264 tons.

Mining accidents. The numbers of fatal and of non-fatal accidents in gold and coal mines during the past five years are shown in the following table. Only those non-fatal accidents have been recorded which rendered the injured unfit for work for a period of at least fourteen days.

MINING ACCIDENTS, 1933 TO 1937.

Year.	Gold Mines.			Coal Mines.		
	Miners Employed.	Persons Killed.	Persons Injured.	Miners Employed.	Persons Killed.	Persons Injured.
1933	6,126	9	5	1,789	1	18
1934	6,943	7	7	1,821	..	9
1935	6,960	5	4	2,012	..	5
1936	6,959	5	21	1,786	1	8
1937	6,180*	8	19	1,749	14	7

* Estimated in 1937—alluvial, 3,081; quartz, 3,099.

Quarries. The recorded quantities and values of the principal kinds of stone which were raised from Victorian quarries during the past five years are as set forth in the following table :—

QUARRIES, 1932-33 TO 1936-37.

Year ended 30th June—	Number of Quarries.	Quantity of Stone Operated on—				Approximate Value of Stone Raised. *
		Bluestone.	Sandstone.	Granite.	Limestone.	
		c. yds.	c. yds.	tons.	tons.	£
1933 ..	73	831,163	..	7,959	161,127	286,898
1934 ..	71	1,082,986	4,360	4,640	176,988	322,905
1935 ..	77	1,026,859	6,667	5,917	273,951	374,454
1936 ..	76	1,206,255	4,180	7,389	307,058	387,554
1937 ..	76	1,306,078	6,272	8,329	274,795	520,121

* Wholesale selling value of stone at the quarry, exclusive of delivery charges therefrom.

MANUFACTURING IN VICTORIA.

It can be said with confidence that the State of Victoria has advantages which should make possible great development in manufacturing industries.

A comparatively compact territory with a temperate climate producing a rich variety of raw materials, an intelligent labour supply supported by almost unlimited power resources, and a growing home market served by an extensive network of State owned railways and constantly improving road communications, leave few other essential requirements except the attraction of capital into the industries, the efficient organization of production, and the extension of markets for the product.

Industrial Progress.

Statistical records of factories date from 1850, when the number of factories in Victoria was 68. In 1900 the total had reached 3,097, employing 64,207 persons, and fairly regular expansion has since taken place, concurrent with the increase in the population and consequent extension of the protected home market. A temporary check in this expansion occurred at the onset of the world depression. The factory statistics from 1927–28 until 1931–32 show clear evidence of the effect of gradually declining prices and restricted activity, which were ultimately responsible for the liquidation of the weaker manufacturing units and substantial writing down of capital invested in secondary industry.

Since 1931–32, steady recovery has been evident. Lower interest rates for money stimulated investment in capital goods; the building trade made marked and continuous progress, which was reflected in the associated secondary industries. Higher prices for wool, wheat, and flour, and a greater volume of exports of other primary produce such as beef, lamb, and dairy products, increased the circulation of money, and the general improvement of Government finances combined with the progressive reduction of unemployment contributed to a more optimistic outlook, which undoubtedly had a beneficial effect on factory production.

The factory statistics for the year 1936–37 are indicative of a much improved state of affairs. Since 1930–31 the number of factories increased by 966 (11·8 per cent.); the persons employed therein increased by 65,367 (51·9 per cent.); the amount of salaries and wages paid increased by £9,913,215 (42·6 per cent.), the value of materials used increased by £27,852,922 (55·3 per cent.); and the value of output improved by £49,266,397 (52·7 per cent.).

The appended table summarizes particulars which indicate the growth of manufacturing since 1917–18. The figures for the the past ten years have been increased by the inclusion of statistics relating to the bakery industry, allowance for which should be made when comparing the figures for the past ten years with those of previous years.

GROWTH IN THE MANUFACTURING INDUSTRIES.

Year.	Number of Factories	Number of Persons employed.	Value of Plant, Machinery, Land, and Buildings.	Amount of Salaries and Wages paid.	Value of Materials used (including containers).	Value of Output.
1	2	3	4	5	6	7
			£	£	£	£
1917–18..	5,627	118,241	25,460,282	12,502,601	42,133,636	67,066,715
1918–19..	5,720	122,349	27,318,735	14,080,403	52,098,737	80,195,677
1919–20..	6,038	136,522	30,804,520	17,702,173	65,563,104	101,475,363
1920–21..	6,532	140,743	35,392,735	21,377,216	65,401,425	106,008,294
1921–22..	6,753	144,876	40,992,280	23,846,495	60,352,561	106,243,181
1922–23..	7,096	152,625	46,423,240	25,457,192	62,568,163	111,286,343
1923–24..	7,289	156,162	53,196,475	27,472,084	62,217,874	113,921,927
1924–25..	7,425	154,158	61,031,975	29,057,052	65,205,233	118,177,398
1925–26..	7,461	152,959	60,396,500	29,329,400	67,164,445	119,986,439
1926–27..	7,690	161,639	63,850,005	31,822,589	69,816,935	127,397,951
1927–28..	8,245	160,357	67,507,020	32,087,851	69,637,778	128,465,317
1928–29..	8,197	156,568	69,909,370	31,533,586	70,100,456	127,897,463
1929–30..	8,195	151,009	72,011,020	30,517,535	66,770,302	122,811,099
1930–31..	8,199	126,016	70,990,071	23,279,689	50,380,110	93,425,795
1931–32..	8,204	128,265	68,350,575	21,258,599	51,727,685	93,388,617
1932–33..	8,612	144,428	67,827,428	23,096,512	56,757,681	102,085,429
1933–34..	8,896	156,334	68,834,279	24,819,143	59,776,270	108,496,310
1934–35..	9,100	169,691	70,591,677	27,318,815	63,387,061	117,182,857
1935–36..	9,160	183,390	71,872,906	30,593,707	74,568,265	134,043,170
1936–37..	9,165	191,383	75,161,894	33,192,904	78,233,032	142,692,192

Prior to 1924–25 the amounts taken by working proprietors as drawings were not included in the figures in column 5 (Salaries and Wages paid).

Factories and Wages Board Legislation.

The first Factories Act in Victoria was passed in 1873, and since that year many other Acts dealing with the subject have been placed upon the statute-book. The *Factories and Shops Act* 1928 consolidated all Acts passed prior to that date. The general provisions of factory legislation, including "Wages Boards," are fully dealt with in Part VI., "Social Condition," of this *Year-Book*.

Statistics Act 1928. Statistics relating to the manufacturing industries of Victoria are collected by the Government Statist in accordance with the provisions of the *Statistics Act* 1928. In the year 1902, Australian statisticians adopted a uniform classification of industries for statistical purposes in all States. A factory was then defined as any establishment employing on the average four persons or more, or any establishment employing less than four persons where machinery is worked by other than manual power, whether the business carried on is that of making or repairing for the trade (wholesale or retail) or for export. In 1930, a new classification, based upon that used in Great Britain for census purposes, was adopted. The definition of a factory was unchanged.

Added Value. In estimating the relative importance of various industries, or the value of manufacturing industry as a whole, the method used is to calculate the value added in the process of manufacture, termed " added value." This is arrived at in the following way :—From the value of output of each industry are deducted the most important items of manufacturing expense such as costs of raw materials, containers, fuel and light, repairs to plant and machinery, replacement of tools, and any other important cost of manufacture, the difference being the value added to raw materials in the process of manufacture, and representing the fund available for the payment of wages, rent. interest, minor expenses, and profit.

It is considered that, owing to the duplication of materials used, the finished product of one process of manufacture forming, as it often does, the raw material for another, an inaccurate impression would be obtained by using the total value of output of manufacturing industries in year to year comparisons. Woollen manufactures might be cited as an example. Greasy wool forms the raw material for the woolscouring industry, the product of which is scoured wool. This is afterwards combed into wool tops which are used in the spinning mills for the manufacture of yarn. In due course the yarn is woven into cloth, the raw material for the clothing industry. If these processes are carried out separately in different factories it is evident that the value of the wool would be counted five times by using value of output as the basis for annual comparisons of manufacturing production.

Added value prevents this double counting, gives a truer picture of the relative economic importance of industries, and also provides a good basis for estimating and comparing productive efficiency in manufacturing.

As added value is based on value of output, the added value per employee is affected not only by output per employee, but also by the price obtained, and should, therefore, in a comparison of the results of different years, be corrected to allow for variations in price levels Other important factors are the quantity and the efficiency of the machinery used in the process of manufacture.

The subjoined table shows the value added per person employed in each class of manufacturing industry for the year ended 30th June, 1937.

As the extent of the mechanization of particular industries affects the value added by manufacturing, comparisons between the different classes of industry would have to take into account interest on the capital employed and depreciation of plant and machinery.

VALUE ADDED, 1936-37.

Class of Industry.	Average Number of Persons Employed.	Value Added.	Value Added per Person Employed.
		£	£ *s.* *d.*
1. Treatment of non-metalliferous mine and quarry products ..	2,630	1,279,790	486 12 3
2. Bricks, pottery, glass, &c. ..	4,244	1,348,477	317 14 9
3. Chemicals, dyes, explosives, paint, oils, and grease	7,342	3,934,174	535 16 11
4. Industrial metals, machines, implements and conveyances ..	48,194	14,057,073	291 13 7
5. Precious metals, jewellery, and plate	2,102	502,471	239 0 11
6. Textiles and textile goods (not dress)	25,467	5,776,280	226 16 4
7. Skins and leather (not clothing or footwear)	4,925	1,483,825	301 5 9
8. Clothing	37,953	7,050,326	185 15 4
9. Food, drink, and tobacco ..	25,902	10,913,498	421 6 10
10. Woodworking and basketware ..	7,289	2,185,853	299 17 8
11. Furniture, bedding, &c. ..	4,565	1,145,974	251 0 9
12. Paper, stationery, printing, book-binding, &c.	13,350	4,477,450	335 7 10
13. Rubber	2,759	1,273,175	461 9 3
14. Musical instruments	96	22,503	234 8 2
15. Miscellaneous products ..	2,495	691,367	277 2 0
16. Heat, light, and power ..	2,070	2,570,045	1,241 11 4
Total	191,383	58,712,281	306 15 7

Omitting the "heat, light and power," industry, the statistics of which have been subjected to some refinement during 1936–37, the total value added in the process of manufacture in the remaining industries averaged £296 11s. 2d. in 1936–37, compared with £288 7s. 3d. for the previous year.

The table hereunder summarizes the total value added by the process of manufacturing in each of the past ten years.

VALUE ADDED IN MANUFACTURING.

Year.	Value of Output.	Expenses of Manufacturing.*	Value Added	Average Number of Persons Employed.	Value Added per Person Employed.
1.	2.	3.	4.	5.	6.
	£	£	£		£ s. d.
1927–28 ..	128,465,317	74,667,052	53,798,265	160,357	335 9 9
1928–29 ..	127,897,463	74,872,184	53,025,279	156,568	338 13 5
1929–30 ..	122,811,099	71,551,731	51,259,368	151,009	339 8 11
1930–31 ..	93,425,795	54,011,827	39,413,968	126,016	312 15 5
1931–32 ..	93,388,617	55,568,989	37,819,628	128,265	294 17 1
1932–33 ..	102,085,429	61,004,327	41,081,102	144,428	284 8 10
1933–34 ..	108,496,310	64,294,665	44,201,645	156,334	282 14 9
1934–35 ..	117,182,857	68,420,266	48,762,591	169,691	287 7 3
1935–36 ..	134,043,170	79,999,480	54,043,690	183,390	294 13 10
1936–37 ..	142,692,192	83,979,911	58,712,281	191,383	306 15 7

* "Expenses of manufacturing" includes the following costs only:—Raw materials, containers, fuel and light, tools replaced, repairs to plant and machinery, lubricating oil, and water.

Column 3 deducted from column 2 gives column 4, which when divided by column 5 gives Column 6.

Production of different industries, 1936-37.

The classification of industries, as adopted in 1930, is set out in the next table. The data shown was compiled from returns rendered compulsorily by all factory proprietors in Victoria.

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1936–37.

Nature of Industry.	Number of Factories.	Rated Horse-power of Engines used.	Average Number of Persons Employed.				Value of—			
			Males.		Females.		Wages paid.	Fuel and Light used.	Materials used, including Containers.	Articles Produced or Work Done.
			Working Proprietors.	Employees.	Working Proprietors.	Employees.				
							£	£	£	£
Class I.—Treatment of Non-metalliferous Mine and Quarry Products.										
Lime, plaster, and asphalt	82	2,529	52	863	1	34	195,128	31,242	399,528	863,275
Marble, slate, &c.	47	1,292	49	330	..	11	84,643	4,344	46,937	174,289
Cement and cement goods	40	4,560	18	975	..	7	202,993	115,720	282,643	1,041,367
Other	10	18,455	3	280	..	7	68,772	48,896	125,803	366,422
Total	179	26,836	122	2,448	1	59	551,536	200,202	854,911	2,445,353
Class II.—Bricks, Pottery, Glass, &c.										
Bricks, tiles, and firebricks	56	11,568	37	1,818	..	75	387,637	143,369	79,323	875,558
Earthenware, china, and porcelain	23	1,360	20	903	..	116	176,221	46,660	61,018	383,765
Glass, including bottles	26	3,989	21	1,126	2	100	257,397	57,278	188,741	752,180
Modelling, &c.	3	2	3	22	..	1	4,816	82	1,322	7,423
Total	108	16,919	81	3,869	2	292	826,071	247,389	330,404	2,018,926

Class III.—Chemicals, Dyes, Explosives, Paint, Oils and Grease.										
Chemicals, drugs, and medicines ..	68	3,197	31	843	5	800	317,918	26,062	927,366	1,975,871
Explosives	7	2,902	1	1,275	..	471	345,579	39,363	449,301	1,036,556
White lead, paints, and varnish ..	35	1,220	18	265	2	50	66,405	6,570	267,392	473,493
Oils, vegetable (including oilcake) ..	19	283	12	109	1	5	23,956	3,222	134,968	199,627
Oils, mineral	11	756	4	154	..	5	35,089	11,308	545,345	959,774
Oils, animal	3	507	..	86	..	12	17,760	8,392	23,862	80,689
Boiling-down, tallow refining, and bone milling works	32	1,867	14	383	..	7	88,376	23,792	257,105	481,859
Soap and candles	19	1,327	10	531	..	159	128,422	27,793	586,545	1,243,208
Chemical fertilizers	5	3,931	..	914	..	7	202,737	37,363	979,279	1,586,252
Inks, polishes, &c.	34	866	14	242	1	177	82,978	3,957	372,333	639,037
Other	3	989	2	215	..	517	103,491	4,659	210,259	397,610
Total	236	17,845	106	5,017	9	2,210	1,412,711	192,481	4,753,746	9,073,976
Class IV. — Industrial Metals, Machines, Implements, and Conveyances.										
Smelting, refining, &c., of iron and steel	203	10,696	198	5,074	1	386	1,127,586	132,824	1,330,988	3,261,293
Engineering (not marine or electrical)	388	13,738	395	7,654	3	263	1,762,495	76,987	2,291,483	5,151,995
Electrical installations and apparatus	125	3,234	86	2,507	1	485	526,989	20,518	752,785	1,588,779
Tramcars and railway carriages, &c.	25	5,754	..	5,737	..	9	1,303,509	55,440	1,264,293	2,886,522
Motor vehicles and cycles—										
(i) Construction and assembly ..	32	1,527	14	2,075	..	151	516,057	13,829	164,877	869,078
(ii) Repairs	953	3,469	739	3,720	2	180	879,945	35,423	705,179	1,984,333
Motor-bodies	86	3,886	85	3,434	1	56	810,293	15,281	1,178,858	2,466,328
Horse-drawn vehicles	139	615	157	429	..	13	104,662	5,264	86,313	226,245
Cycle and motor accessories ..	29	968	20	494	1	43	103,341	6,226	113,685	280,984
Ship and boat building and repairing, marine engineering	10	2,541	7	315	..	2	64,734	3,705	22,534	113,758
Cutlery and small tools (not machine tools)	34	453	28	188	..	8	43,768	2,441	21,194	94,676
Agricultural implements	74	7,939	64	3,280	1	141	757,743	49,118	855,674	1,903,662

Factories—Power, Workers, Wages, etc., and Production, 1936-37—*continued.*

Nature of Industry.	Number of Factories.	Rated Horse-power of Engines used.	Average Number of Persons Employed.				Value of—			
			Males.		Females.					
			Working Proprietors.	Employees.	Working Proprietors.	Employees.	Wages paid.	Fuel and Light used.	Materials used, including Containers.	Articles Produced or Work Done.
Class IV. — Industrial Metals, Machines, Implements, and Conveyances—continued.							£	£	£	£
Brass and copper	96	1,671	90	1,642	1	79	325,901	18,963	286,856	919,723
Galvanized-iron working and tinsmithing	107	2,084	90	2,275	1	372	450,669	16,343	1,009,189	1,811,054
Wireworking (including nails) ..	34	1,848	26	867	..	55	167,145	9,112	531,887	881,599
Art metal works	23	735	18	586	2	27	107,326	4,036	122,680	296,579
Stoves and ovens	23	1,216	25	677	1	57	153,688	19,929	176,444	441,628
Gas fittings and meters	10	193	3	449	..	1	105,910	2,885	66,957	222,094
Wireless apparatus	25	412	22	980	..	216	145,117	4,886	402,118	641,636
Die sinking and engraving	16	74	19	98	1	6	17,657	652	8,171	36,330
Other metal works	79	1,128	46	963	2	50	179,970	11,086	468,433	771,554
Total	2,511	64,181	2,132	43,444	18	2,600	9,654,505	504,948	11,854,598	26,849,850
Class V.—Precious Metals, Jewellery, and Plate.										
Jewellery	69	420	64	553	1	231	133,622	3,128	179,681	389,845
Watches and clocks	13	37	9	85	1	5	19,977	384	11,044	41,942
Gold, silver, and electroplate ..	50	1,534	41	955	..	84	190,584	9,651	137,435	397,470
Other	6	57	10	61	..	2	14,031	1,175	63,703	88,417
Total	138	2,048	124	1,654	2	322	358,214	14,338	391,863	917,674

Class VI.—Textiles and Textile Goods (not dress).										
Cotton	18	3,368	8	564	2	1,043	215,675	18,149	619,242	1,099,672
Wool, worsted and shoddy (including wool scouring)	52	23,874	44	4,848	1	5,143	1,320,125	159,801	3,689,537	6,156,701
Hosiery and other knitted goods ..	208	5,264	149	3,483	72	7,892	1,427,980	64,993	2,564,249	5,213,388
Silk, natural and artificial ..	5	583	3	160	..	305	58,465	5,318	239,124	431,624
Rope and cordage	9	3,462	8	691	..	323	135,550	14,575	379,613	732,515
Canvas goods (tents, tarpaulins, and sailmaking)	20	61	17	92	1	112	37,202	724	126,987	199,722
Bags and sacks	22	156	24	97	..	83	31,051	888	141,748	201,433
Other	17	506	13	219	1	69	53,052	4,780	136,153	227,888
Total	351	37,274	266	10,154	77	14,970	3,279,100	269,228	7,896,653	14,262,943
Class VII.—Skins and Leather (not Clothing or Footwear).										
Furs, skins, leather—										
Furriers and fur dressing ..	69	268	69	318	13	387	113,670	2,346	313,990	486,318
Fellmongery	22	1,635	18	394	..	..	90,204	13,352	665,390	900,881
Tanning, currying, and leather dressing	41	7,460	57	2,371	..	32	506,810	36,166	1,610,687	2,517,926
Saddlery, harness, bags, trunks, &c.—										
Saddlery, harness, and whips ..	11	52	11	71	..	12	15,642	202	19,530	44,356
Machine belting	6	100	5	64	..	2	15,261	525	52,910	91,678
Bags, trunks, other leather goods	59	173	58	392	8	643	137,399	2,098	281,062	505,888
Total	208	9,688	218	3,610	21	1,076	878,986	54,689	2,943,569	4,547,047

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1936-37—*continued.*

Nature of Industry.	Number of Factories.	Rated Horse-power of Engines used.	Average Number of Persons Employed.				Value of—			
			Males		Females.		Wages paid.	Fuel and Light used.	Materials used, including Containers.	Articles Produced or Work Done.
			Working Proprietors.	Employees.	Working Proprietors.	Employees.				
							£	£	£	£
Class VIII.—Clothing.										
Tailoring and slop clothing ..	386	937	390	1,543	50	6,170	1,038,495	21,563	1,979,624	3,449,824
Waterproof and oilskin clothing ..	7	136	5	59	1	172	33,546	1,421	52,696	113,169
Dressmaking	442	829	170	402	308	7,159	890,358	15,018	1,599,573	2,891,862
Millinery	61	176	20	94	19	1,254	145,264	3,098	196,752	426,836
Shirts, collars, and underclothing ..	118	1,066	79	370	38	4,431	528,631	11,597	1,246,769	2,100,399
Stays and corsets	8	281	6	158	2	913	119,275	2,319	311,860	555,796
Handkerchiefs, ties, and scarves ..	22	75	14	36	7	542	65,265	1,209	138,036	254,770
Hats and caps	40	972	33	628	5	737	213,149	10,435	297,180	652,896
Boots and shoes	165	3,219	188	4,422	19	4,733	1,354,623	27,948	2,395,438	4,288,431
Boot repairing	493	624	483	192	3	12	100,975	2,975	78,268	224,106
Boot accessories	28	851	16	481	2	220	121,044	4,936	291,285	516,837
Umbrellas and walking sticks ..	6	18	3	24	..	34	8,833	143	18,242	37,157
Dyeworks and cleaning	40	780	47	383	9	467	149,807	14,449	51,114	338,409
Other	16	99	10	57	5	328	45,328	1,252	79,995	171,488
Total	1,832	10,063	1,464	8,849	468	27,172	4,814,593	118,363	8,736,832	16,021,980

Class IX.—Food, Drink, and Tobacco.										
Grain milling	38	6,911	19	1,058	..	35	255,397	56,037	4,975,111	5,574,290
Cereal foods and starch	28	4,216	4	579	2	345	172,373	23,807	909,812	1,477,783
Cattle and poultry foods	6	161	3	23	..	..	5,731	277	43,265	57,488
Chaff-cutting and corn crushing ..	113	2,550	33	376	..	10	73,117	8,782	529,442	674,095
Bakeries	556	2,289	465	2,408	115	386	651,183	79,869	1,867,858	3,114,907
Biscuits	12	1,367	14	530	4	568	139,639	19,216	342,433	685,696
Sugar confectionery (including chocolates)	59	4,970	51	1,211	7	1,588	445,854	31,001	1,120,661	1,860,993
Jam, fruit, and vegetable canning ..	27	2,454	17	1,275	..	1,271	433,523	29,087	1,747,392	2,717,054
Pickles, sauces, and vinegar ..	18	699	16	166	2	121	54,424	5,554	160,453	306,047
Bacon curing	20	3,954	18	511	..	25	120,440	17,606	789,851	985,645
Butter and cheese factories, &c. ..	175	11,899	31	2,434	1	393	629,230	151,767	9,089,205	10,825,003
Margarine and butterine	7	327	1	65	..	5	14,534	1,737	127,629	173,076
Meat and fish preserving, meat extracts	8	170	2	113	..	97	31,759	2,989	199,562	309,959
Condiments, coffee, and spices, &c.	67	1,197	18	428	1	435	133,675	9,251	616,562	913,802
Ice and refrigerating	87	13,941	51	2,094	1	74	498,129	83,538	187,287	1,000,664
Aerated waters, cordials, &c. ..	87	867	63	451	1	49	103,962	5,600	199,888	474,290
Breweries	9	6,815	1	1,302	..	22	456,312	54,566	987,897	2,499,494
Distilleries	7	405	..	77	..	4	18,755	7,300	69,926	170,121
Malting	19	870	5	280	2	6	85,495	17,074	368,108	591,317
Bottling	11	59	1	125	..	9	32,894	1,322	60,660	117,113
Tobacco, cigars, cigarettes, and snuff	15	1,761	11	841	2	1,165	380,873	7,116	1,741,706	2,720,996
Dried fruits	25	1,210	..	545	..	191	126,340	4,735	112,525	304,766
Ice Cream	35	1,244	27	143	1	65	40,473	7,107	95,733	236,768
Sausage skins	8	52	8	286	..	4	60,445	1,325	202,046	304,205
Other	19	5,335	8	663	..	44	150,536	38,657	3,118,603	3,674,577
Total	1,456	75,723	867	17,984	139	6,912	5,115,093	665,320	29,663,615	41,770,149

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1936-37—*continued.*

Nature of Industry.	Number of Factories.	Rated Horse-power of Engines used.	Average Number of Persons Employed.				Value of—			
			Males.		Females.					
			Working Proprietors.	Employees.	Working Proprietors.	Employees.	Wages paid.	Fuel and Light used.	Materials used, including Containers.	Articles Produced or Work Done.
							£	£	£	£
Class X.—Woodworking and Basketware.										
Sawmills (forest)	192	5,410	216	1,722	3	10	371,772	13,011	377,618	959,538
Sawmills (town)	121	9,258	87	1,469	1	35	328,120	19,776	1,143,077	1,745,784
Joinery	190	3,324	145	1,402	..	70	326,189	9,964	477,412	923,653
Cooperage	12	606	6	244	..	1	79,387	1,944	60,679	177,161
Boxes and cases	62	4,121	50	855	5	14	177,197	12,213	412,132	708,790
Woodturning, woodcarving, &c. ..	80	1,739	78	482	1	24	105,207	5,377	157,506	339,300
Basket and wickerware, seagrass and bamboo furniture	15	131	12	133	..	1	23,077	585	32,933	71,043
Perambulators	10	66	14	79	1	12	16,695	301	36,860	68,788
Other	12	223	6	83	..	28	16,984	2,406	38,596	72,305
Total	694	24,878	614	6,469	11	195	1,444,628	65,577	2,736,813	5,066,362

Class XI.—Furniture, Bedding, &c.										
Billiard tables, cabinet and furniture making, and upholstery ..	296	4,734	318	2,783	2	201	547,152	16,805	814,386	1,655,149
Bedding and mattresses	39	1,601	25	419	2	233	96,929	7,400	403,729	626,689
Furnishing, drapery	31	89	5	79	10	366	55,124	618	141,387	238,335
Picture frames	8	14	7	40	..	24	10,883	159	11,408	26,984
Window blinds, verandah blinds, &c.	10	14	8	15	2	26	6,879	143	14,969	26,835
Total	384	6,452	363	3,336	16	850	716,967	25,125	1,385,879	2,573,992
Class XII.—Paper, Stationery, Printing, Bookbinding, &c.										
Newspapers, &c.	116	3,932	107	2,213	2	116	688,287	24,014	811,268	1,880,660
Printing—Government, &c. ..	3	875	..	610	..	271	190,706	5,851	114,854	352,248
General printing, &c.	428	4,622	462	3,641	10	1,552	1,061,657	27,359	1,074,028	2,758,512
Stationery and paper products ..	26	965	17	399	1	684	153,047	6,159	350,027	781,034
Stereotyping and electrotyping ..	8	138	8	72	2	8	18,882	1,083	11,684	47,542
Process and photo engraving ..	16	110	36	310	..	28	94,445	1,890	24,680	165,550
Cardboard boxes, cartons, &c. ..	31	1,418	16	490	..	868	188,706	6,464	354,881	741,558
Paper bags	14	122	9	72	3	172	29,893	846	88,857	143,186
Other paper and printing	23	24,323	16	897	9	249	264,958	100,989	566,985	1,312,403
Total	665	36,505	671	8,704	27	3,948	2,690,581	174,655	3,397,264	8,182,693
Class XIII.—Rubber Goods ..	102	19,517	74	1,923	..	762	539,781	105,232	1,949,025	3,455,116
Class XIV.—Musical Instruments ..	14	63	12	83	..	1	19,354	256	8,041	30,888

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1936-37—*continued.*

Nature of Industry	Number of Factories.	Rated Horse-power of Engines used.	Average Number of Persons Employed.				Value of—			
			Males.		Females.		Wages paid.	Fuel and Light used.	Materials used including Containers.	Articles Produced or Work Done.
			Working Proprietors.	Employees.	Working Proprietors.	Employees.				
							£	£	£	£
Class XV.—Miscellaneous Products.										
Brooms and brushes	17	278	9	254	1	87	57,742	1,452	137,562	236,057
Surgical, optical, and other scientific instruments	52	143	30	252	1	25	66,801	1,870	62,500	155,490
Toys, games, and sports requisites ..	46	694	39	459	..	177	107,798	4,699	151,593	378,549
Artificial flowers	7	7	5	49	3	181	19,483	321	32,398	67,866
Other	42	1,794	28	613	3	279	132,373	13,121	350,703	634,292
Total	164	2,916	111	1,627	8	749	384,197	21,463	734,756	1,472,254
Class XVI.—Heat, Light, and Power.										
Electric light and power—										
(*a*) Government	11	455,220	..	991	..	3	234,060	448,055	2,426	2,060,665
(*b*) Local authority	41	14,230	..	272	..	..	67,865	63,168	789	505,958
(*c*) Companies	32	4,504	8	72	..	..	18,173	12,785	70	68,528
Gas works—										
(*a*) Local authority	10	62	..	66	..	3	14,782	3,882	24,258	59,990
(*b*) Companies	29	4,215	..	652	..	3	171,707	115,022	567,520	1,307,848
Total	123	478,231	8	2,053	..	9	506,587	642,912	595,063	4,002,989
Total all Classes ..	9,165	829,139	7,233	121,224	799	62,127	33,192,904	3,302,178	78,233,032	142,692,192

INDIVIDUAL INDUSTRIES.

The salient features of the chief industries are set forth in the succeeding pages.

Tanneries. Tanning was one of the earliest industries established in Victoria; in the year 1850 there were thirteen tanneries in the State. Particulars relating to the industry for the year 1927–28 and the past four years are given in the following table :—

Item.	1927–28.	1933–34.	1934–35.	1935–36.	1936–37.
Number of establishments ..	42	53	50	43	41
Number of persons engaged ..	1,899	2,139	2,159	2,415	2,460
Horsepower of engines used ..	3,948	4,615	4,671	4,612	7,460
Value of plant and machinery £	399,160	268,896	259,072	250,430	241,453
Value of land and buildings £	486,370	421,212	435,520	408,178	418,191
Salaries and wages paid £	476,559	372,406	410,364	475,765	506,810
Fuel, light, and power £	39,905	33,025	31,976	35,251	36,166
Value of materials used £	1,724,767	1,348,060	1,309,201	1,492,039	1,610,687
Value of output .. £	2,623,798	2,029,007	2,002,646	2,346,531	2,517,926
Value added to materials £	831,315	614,230	626,687	776,861	823,082
Materials treated—					
Cow and ox hides ..	539,327	762,541	745,102	837,375	921,075
Calf hides	465,543	709,403	638,971	621,562	334,578
Other skins and pelts ..	1,293,259	1,429,068	1,389,835	1,505,445	1,115,689
Bark used .. tons	9,792	10,331	10,757	11,424	10,559
Sole leather produced lb.	11,959,650	13,079,341	13,159,441	13,425,826	12,808,892

The value of leather imported into Victoria from oversea countries during the year ended 30th June, 1937, was £73,737 ; the value of leather exported in the same period was £387,896.

Soap, candles, etc. The manufacture of soap was also one of the earliest of Victorian industries. In the year 1850 the recorded production of the four establishments then operating was 5,840 cwt. of soap. The following table indicates the development which has since taken place.

Item	1927–28.	1933–34.	1934–35.	1935–36.	1936–37.
Number of establishments ..	17	20	20	20	19
Number of persons engaged ..	666	661	669	680	700
Horsepower of engines used ..	824	684	646	769	1,327
Value of plant and machinery £	231,700	232,283	207,872	197,518	206,879
Value of land and buildings £	236,800	197,436	197,534	195,054	203,741
Salaries and wages paid £	141,241	111,322	118,751	123,355	128,422
Fuel, light and power £	35,461	23,975	23,268	24,634	27,793
Value of materials used £	635,309	427,629	457,587	556,797	586,545
Value of output .. £	1,140,394	929,123	985,725	1,013,180	1,243,208
Value added to materials £	437,548	466,253	492,395	399,345	595,056
Materials treated—					
Tallow .. .. cwt.	196,740	210,911	212,661	198,924	217,831
Alkali .. .. ,,	70,152	89,633	96,311	119,721	100,649
Copra oil .. ,,	26,281	24,675	27,401	41,877	47,393
Output—					
Soap, household cwt.	282,038	224,333	206,573	205,550	199,166
,, Sand .. ,,	21,064	28,272	32,923	38,186	34,121
,, Toilet .. ,,	20,628	16,233	16,726	16,903	19,192
Soda crystals .. ,,	32,455	38,617	38,992	36,253	30,629

Other items of manufacture include soft soap, wool scouring soap, soap extract, candles, glycerine, &c.

The imports from oversea countries in 1936–37 included 231,779 lb. of soap and 178,854 lb. of soap substitutes, valued at £9,647, and £4,748 respectively, and 26,071 lb. of candles, &c., valued at £1,477.

Bricks, pottery pipes and tiles. These industries are grouped because some establishments which produce bricks also manufacture tiles, and others which produce tiles, also manufacture pipes and pottery. Factories manufacturing cement pipes and tiles are not included herein, but are grouped with those making cement and cement products.

Item.	1927–28.	1933–34.	1934–35.	1935–36.	1936–37.
Number of establishments ..	83	73	75	79	79
Number of persons engaged ..	2,524	1,876	2,358	2,868	2,969
Horse-power of engines used ..	8,827	8,590	10,449	11,311	12,922
Value of plant and machinery £	519,710	447,938	444,010	490,969	524,667
Value of land and buildings £	545,260	520,495	536,594	563,500	547,025
Salaries and wages paid £	576,593	293,369	392,465	509,958	563,858
Fuel, light, and power £	240,254	107,159	142,928	178,439	190,029
Value of materials used £	156,492	83,685	125,772	146,084	140,341
Value of output .. £	1,326,205	702,145	924,494	1,188,968	1,259,323
Value added to materials £	874,882	479,512	600,842	794,906	859,506
Production—					
Bricks, common .. (1,000)	198,775	120,657	152,593	195,680	183,727
Firebricks .. (1,000)	5,502	3,634	6,413	6,351	5,187
Roofing tiles .. (1,000)	12,030	4,866	8,411	10,663	10,232
Pipes .. .. £	171,908	55,618	95,142	131,984	151,681
Pottery .. £	177,225	114,059	131,363	181,876	242,987

Forest Saw-mills. Detailed information in regard to the forest saw-mills of the State for the six years 1931–32 to 1936–37 is given in the table which follows :—

FOREST SAW-MILLS, 1931–32 TO 1936–37.

Year.	Number of Mills.	Value of Machinery and Plant in Use.	Persons Employed.	Salaries and Wages Paid.	Victorian Timber Sawn.	
					Quantity.	Value.
		£		£	super ft.	£
1931–32 ..	155	344,488	1,232	222,351	49,412,410	326,587
1932–33 ..	173	388,590	1,576	281,115	68,957,218	419,583
1933–34 ..	182	372,978	1,894	336,556	81,078,557	511,858
1934–35 ..	202	392,217	2,368	422,798	97,110,074	642,058
1935–36 ..	193	380,800	2,486	462,042	105,934,903	719,714
1936–37 ..	192	395,419	1,951	371,772	122,907,580	865,789

The reduction in the number of persons employed and in the amount paid in salaries and wages during the year 1936–37, is due to the rigid exclusion from these statistics of all persons engaged in felling and hauling timber from forest to mills. The number of persons employed now quoted is comprised of those working in the sawmills only.

In addition to the forest saw-mills there were 502 other factories working in wood. Particulars relating to these for the year 1936–37 are given on page 488.

Firewood. The quantity of timber sawn for firewood consumption in the year 1936–37 was 293,615 tons valued at the sawmills at £195,230. There is also a large amount of firewood taken from the forests which does not pass through these sawmills and its value cannot be reliably estimated. The increased use of brown coal briquettes and the extension of the use of gas and electricity for cooking and heating have caused a reduction in the demand for firewood in recent years.

Agricultural and Dairy Machinery Works. The Agricultural Implement Industry naturally showed the effect of the low prices received by farmers for agricultural produce during the years 1930–34. Substantial improvement is indicated by the statistics for the year 1936–37.

AGRICULTURAL AND DAIRY MACHINERY WORKS.

Item.	1927–28.	1933–34.	1934–35.	1935–36.	1936–37.
Number of establishments ..	77	73	71	70	74
Number of persons employed	3,353	2,436	2,461	2,828	3,486
Horse-power of engines used	4,127	3,003	3,490	3,590	7,939
Value of land and buildings £	364,350	281,091	283,661	290,084	342,503
Value of plant and machinery £	362,290	282,827	279,090	290,819	360,033
Salaries and wages paid £	806,978	448,763	456,056	568,695	757,743
Value of materials used £	791,974	500,845	466,451	610,477	855,674
Fuel, light, and power used £	57,011	34,959	36,414	41,132	49,118
Value of output .. £	2,003,855	1,146,894	1,132,644	1,445,497	1,903,662

Bacon curing. In the following table particulars of bacon and ham curing establishments are given for the year 1927–28 and the past four years.

BACON CURING.

Item.	1927–28.	1933–34.	1934–35.	1935–36.	1936–37.
Number of establishments ..	21	20	21	21	20
Number of persons employed	539	516	518	546	554
Horse-power of engines used	1,825	3,184	3,138	3,105	3,954
Value of land, buildings, plant, &c. .. .. £	340,820	345,686	343,296	353,720	360,320
Salaries and wages paid £	145,452	117,713	122,124	122,679	120,440
Value of materials used £	1,097,918	640,271	659,465	733,807	789,851
Value of fuel and light £	21,507	17,626	17,005	17,742	17,606
Value of output .. £	1,426,533	887,186	915,495	953,305	985,645
Pigs slaughtered for curing No.	210,547	187,092	176,898	198,148	192,002
Bacon and ham cured—					
In factories .. lb.	19,628,277	16,279,693	15,189,047	17,099,550	16,652,906
On farms .. lb.	976,871	1,455,760	1,144,971	1,065,618	918,886

Butter and cheese factories.

The number of butter, cheese, and kindred factories in 1936–37 was 175. Of these 142 were making butter, 26 cheese, 3 concentrated milk, 4 condensed milk, 10 powdered milk, 7 casein, and 1 milk sugar. There were also 15 creameries attached to the factories. The following table gives some indication of the value of this industry to the State :—

BUTTER AND CHEESE FACTORIES, 1927–28 TO 1936–37.

Year.	Number of Factories.	Value of Machinery, Plant, Land, and Buildings.	Persons Employed.	Salaries and Wages Paid.	Value of Output.
		£		£	£
1927–28 ..	179	2,021,330	2,426	572,907	8,681,454
1928–29 ..	169	1,931,360	2,449	582,411	9,614,084
1929–30 ..	163	2,040,058	2,387	586,395	8,753,102
1930–31 ..	165	2,025,267	2,235	542,374	8,077,608
1931–32 ..	169	2,005,965	2,346	516,619	8,353,481
1932–33 ..	174	2,061,690	2,455	514,584	7,998,432
1933–34 ..	175	2,088,195	2,509	506,109	6,745,845
1934–35 ..	179	2,116,447	2,711	543,372	8,213,097
1935–36 ..	176	2,163,363	2,680	560,621	10,251,289
1936–37 ..	175	2,315,765	2,859	629,230	10,825,003

Further particulars relating to butter and cheese factories will be found under the heading of Dairying on pages 449 to 451.

BAKERIES (INCLUDING BREAD, PASTRY, AND CAKES, ETC.), 1932–33 TO 1936–37.

As the statistical definition of a factory (see page 479) excludes from enumeration many small bakehouses making bread, cake, pastry, &c., the operations of only 556 of the 1,649 bakehouses registered at the Factories Department during the year 1936 are embraced by the

table hereunder. Whilst the value of the total putput of the 537 factories is shown therein, details of the output of pastry, pies, scones, &c., have not been tabulated. It must be explained that the value quoted is the wholesale selling value of the goods at the factory exclusive of all selling and delivery costs.

BAKERIES, 1932-33 TO 1936-37.

Item.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
Number of factories ..	509	535	538	537	556
Number of persons employed	2,843	2,942	3,048	3,131	3,374
Horse-power of engines used..	2,078	1,994	2,100	2,138	2,289
Value of land and building £	1,049,848	1,117,561	1,094,995	1,132,603	1,158,299
Value of plant and machinery £	378,451	366,329	365,644	365,988	377,886
Salaries and wages paid ..	547,113	567,294	573,723	597,453	651,183
Value of materials used £	1,405,226	1,494,802	1,580,561	1,755,585	1,867,858
Fuel, light, and power £	76,128	77,102	85,847	77,614	79,869
Repairs, oil and water used £	25,956	25,382	29,920	30,975	35,736
Total output .. £	2,382,547	2,520,665	2,680,074	2,842,227	3,114,907
Value added in process of manufacture .. £	875,237	923,379	983,746	978,053	1,131,444
Value added per worker £	308	314	323	312	335
Flour used—short tons ..	89,400	93,443	92,231	94,115	94,742
Bread made—4-lb. loaves ..	54,418,524	54,422,715	56,046,014	56,318,333	56,683,427

Meat freezing and preserving works.

Meat freezing, preserving, and meat extract works numbered 33 in 1936-37, and gave employment to 1,923 hands, the wages paid amounting to £464,179. The approximate value of machinery, plant, land and buildings in that year was £1,367,786. Further details regarding these industries appear on page 487, and particulars of the output for the past five years are given in the following table :—

Item.		1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
Frozen meat—						
Cattle	qrs.	45,856	44,576	60,292	107,496	†433,926
Sheep and Lambs	No.	2,731,287	2,845,625	3,253,640	3,784,083	4,049,966
Rabbits and hares	,,	5,891,414	5,438,610	8,595,868	4,475,210	3,913,437
Poultry ..	,,	48,164	30,164	46,420	323,451	257,741
Pigs	,,	16,789	13,406	13,599	37,863	86,504
Preserved meat ..	cwt.	*12,468	*10,961	*6,746	45,722	49,448

* Incomplete. † Includes chilled.

Imports and exports of meats, Victoria.

The following statement shows the imports from and exports to oversea countries of frozen and preserved meats during the year ended 30th June, 1937.

MEAT IMPORTED AND EXPORTED OVERSEA, 1936-37.

Meats.	Imports.		Exports.	
	Quantity.	Value.	Quantity.	Value.
		£		£
Frozen—				
Beef	lb. 2,333	65	lb. 11,018,738	137,564
Game	,, 8,395	529	..	..
Lamb	..	..	,, 102,436,881	2,803,421
Mutton	..	..	,, 16,058,586	283,521
Pork	..	..	,, 12,454,887	313,488
Poultry	,, 11,361	479	Pr. 15,250	11,782
Rabbits and Hares ..	..	..	,, 1,340,572	58,331
Veal	..	..	lb. 2,577,064	38,293
Other	,, 1,316	48	,, 4,509,604	117,808
Bacon and Hams ..	,, 1,118	52	,, 93,528	4,770
Potted and Concentrated ..	,, 23,505	5,737	*	620
Preserved in tins ..	,, 20,090	1,167	,, 1,238,350	46,150
Sausage Casings	cwt. 4,428	81,894	cwt. 14,284	277,149
Other	,, 20	47	,, 2,358	3,104
Total value ..	..	90,018	..	4,096,001

* Not available.

Flour mills.

Victorian flour mills produce ample flour, &c., to supply all local requirements and a considerable surplus for export. During the year 1936-37, 233,283 tons of flour, valued at £2,292,958, were exported from Victoria to countries beyond Australia. The following table gives particulars of the industry for the year 1927-28 and for the past four years :—

Item.	1927-28.	1933-34.	1934-35.	1935-36.	1936-37
Number of establishments ..	42	39	40	38	38
Number of persons engaged	971	1,018	1,105	1,113	1,112
Horse-power of engines used	5,934	6,238	6,054	6,151	6,911
Value of plant and machinery £	652,300	483,187	482,026	543,396	508,072
Value of land and buildings £	466,400	492,511	495,431	553,578	546,587
Salaries and wages paid £	267,347	230,638	248,284	259,587	255,397
Fuel, light, and power £	53,027	52,287	55,916	57,916	56,037
Value of materials used £	4,866,676	2,782,475	3,234,878	3,729,365	4,975,111
Value of output .. £	5,665,103	3,530,866	3,880,026	4,411,691	5,574,290
Value added to materials £	721,590	665,437	555,261	591,263	511,878
Wheat ground into flour bushels	17,659,570	19,274,937	21,037,166	20,668,321	20,007,887
Flour produced .. tons (2,000 lb.)	367,383	395,566	437,262	435,340	420,364
Bran produced .. bushels	7,987,930	8,766,725	9,835,723	9,600,596	8,983,200
Pollard produced .. ,,	7,264,370	8,430,651	9,114,002	9,628,825	9,197,800
Wheatmeal produced cwt.	28,874	67,511	91,103	90,246	122,100

Jam, pickle, and sauce works.

Particulars relating to jam, pickle, sauce, fruit and vegetable canning factories are given in the table hereunder, which shows the main items of output, etc., for the past five years.

Item.	1932–33.	1933–34.	1934–35.	1935–36.	1936–37.
Number of establishments ..	42	46	43	43	45
Number of persons engaged ..	2,141	2,280	2,489	2,755	2,868
Horse-power of engines used ..	2,150	2,263	2,249	2,397	3,153
Value of plant and machinery £	276,690	297,402	292,796	310,891	326,249
Value of land and buildings £	484,350	517,129	530,966	570,205	635,774
Salaries and wages paid £	336,764	354,708	388,675	456,723	487,947
Fuel, light, and power used £	24,979	26,259	29,310	33,419	34,641
Value of materials used £	1,542,032	1,355,740	1,570,398	1,838,565	1,907,845
Value of output .. £	2,360,398	2,159,672	2,581,111	2,918,703	3,023,101
Fruit used .. cwt.	987,275	773,396	711,563	874,452	913,275
Sugar used .. „	277,825	262,239	265,239	285,065	315,240
Output of—					
Jams and jellies .. cwt.	312,344	314,025	274,667	317,346	324,452
Fruit preserved .. „	605,418	406,209	522,209	631,296	677,085
Fruit pulped .. „	85,742	59,227	54,550	71,544	82,442
Sauce .. .. pints	6,104,954	6,906,114	8,153,199	8,886,488	8,410,984
Pickles .. .. „	854,511	1,286,455	1,696,438	1,704,039	2,189,510

Beet Sugar Industry.

The following table contains particulars relating to the production, etc., of sugar in the beet sugar factory under the control of the Victorian Government at Maffra, Gippsland. A brief survey of the progress of this industry since its establishment was given in the *Victorian Year-Book* for 1928–29.

Season.	Area Harvested.	Sugar Beet Harvested.	Sugar Produced.
	acres.	tons.	tons.
1927–28	2,353	25,439	2,349
1928–29	2,130	15,236	2,108
1929–30	2,500	26,525	3,472
1930–31	3,045	38,291	5,095
1931–32	3,173	43,209	5,428
1932–33	3,155	36,740	5,701
1933–34	3,234	50,625	5,303
1934–35	3,062	40,788	4,998
1935–36	3,165	37,634	5,115
1936–37	3,475	31,079	4,180

Breweries and Distilleries. Particulars regarding breweries and distilleries for the year 1927–28 and the past four years are set forth in the succeeding tables.

BREWERIES.

Item.	1927–28.	1933–34.	1934–35.	1935–36.	1936–37.
Number of breweries ..	9	10	10	9	9
Number of persons engaged ..	1,169	1,123	1,193	1,258	1,325
Horse-power of engines ..	5,683	4,034	4,105	4,160	6,815
Value of plant and machinery £	858,800	874,219	889,315	855,072	842,958
Value of land and buildings £	641,590	722,308	731,235	731,229	766,377
Salaries and wages paid £	394,094	357,034	381,620	423,986	456,312
Fuel, light and power used £	67,270	47,984	49,944	51,054	54,566
Value of materials used £	1,079,919	762,785	849,505	940,621	987,897
Value of output .. £	2,534,815	1,909,253	2,279,793	2,417,226	2,499,494
Value added to materials £	1,349,702	1,017,189	1,288,077	1,322,947	1,345,467
Materials used—					
Sugar .. .. cwt.	116,890	82,433	91,476	101,150	106,042
Malt .. .. bush.	815,882	709,160	764,032	836,103	863,330
Hops .. .. lb.	814,812	626,140	654,226	728,876	746,794
Beer and stout made gals.	25,870,000	21,912,248	23,576,149	25,974,483	27,246,234

DISTILLERIES.

Item.	1927–28.	1933–34.	1934–35.	1935–36.	1936–37.
Number of distilleries ..	7	7	7	7	7
Number of persons engaged ..	105	110	150	134	81
Horse-power of engines ..	346	582	598	630	405
Value of plant and machinery £	104,490	167,487	158,164	146,755	112,381
Value of land and buildings £	71,910	200,559	197,819	203,664	188,848
Salaries and wages paid £	27,383	28,154	32,171	32,062	18,755
Fuel, light and power £	8,741	7,416	8,706	7,838	7,300
Value of materials used £	143,009	55,078	92,502	101,399	69,926
Value of output .. £	247,099	144,966	237,078	223,209	170,121
Materials used—					
Wine .. .. gals.	803,517	847,810	792,864	1,135,844	2,147,674
Malt .. .. bush.	113,404	53,192	89,592	58,571	34,160
Other grain .. bush.	..	64,299	109,910	78,829	58,091
Molasses .. lb.	1,513,792	1,798,832	1,205,680	1,466,304	1 723,120
Spirits distilled in proof distilleries gals.	709,031	502,448	664,739	606,996	594,134
Spirits distilled by proof wine-growers gals.	10.110	28,422	14,847	20,353	36,798

Tobacco Factories. The number of tobacco, cigar, and cigarette factories licensed in 1936–37 was twenty-nine, of which fourteen were too small to be classified statistically as factories and were consequently not included in the statistical tabulation on page 487. In the year mentioned the remaining fifteen gave employment to 2,019 persons, who were paid £380,873 in wages and who used machinery, plant, land, and buildings valued at £593,100. The subjoined table

shows the quantity of tobacco leaf used by and the output of the full number of licensed establishments for the past ten years :—

TOBACCO FACTORIES, 1927-28 TO 1936-37.

Year.	Unmanufactured Leaf Operated on.		Quantity Manufactured.			
	Australian.	Imported.	Tobacco.	Snuff.	Cigars.	Cigarettes.
	lb.	lb.	lb.	lb.	number.	number.
1927-28 ..	462,279	4,579,586	5,511,072	—	26,688,939	68,537,354
1928-29 ..	450,083	4,585,040	5,351,643	4,527	24,094,483	96,032,175
1929-30 ..	491,936	4,319,954	5,450,116	—	23,739,045	91,309,252
1930-31 ..	1,818,722	3,551,324	5,575,051	—	20,592,865	278,304,141
1931-32 ..	1,441,938	3,991,979	5,548,931	—	15,020,743	375,371,651
1932-33 ..	1,574,135	4,184,640	5,829,704	—	18,503,055	412,015,592
1933-34 ..	1,589,744	3,737,635	5,034,477	—	18,932,673	473,677,018
1934-35 ..	1,494,725	3,784,672	4,815,978	—	19,479,242	550,359,781
1935-36 ..	1,543,839	4,132,698	5,121,360	—	22,226,147	615,493,655
1936-37 ..	1,509,120	4,150,400	4,906,102	—	22,744,652	670,676,576

Woollen mills.

Victorian manufacturers supply more than half of the Australian requirements in woollen piece goods. They have recently considerably increased their export trade in wool tops and noils, the value of which for the year 1936-37 was £125,584.

WOOLLEN MILLS.

Item.	1927-28.	1933-34.	1934-35.	1935-36.	1936-37.
Number of establishments ..	29	41	43	50	52
Number of persons employed	6,752	9,231	9,195	10,085	10,036
Horse-power of engines ..	13,335	16,778	16,805	18,927	23,874
Value of plant and machinery £	1,969,880	1,585,677	1,591,320	1,711,725	1,776,088
Value of land and buildings £	1,045,440	1,196,546	1,197,983	1,312,840	1,252,528
Salaries and wages paid £	1,087,006	1,170,309	1,175,332	1,383,210	1,320,125
Fuel, light and power £	140,730	167,435	151,436	163,138	159,801
Value of materials used £	2,432,953	2,657,884	2,128,231	3,425,557	3,689,537
Value of output £	4,680,740	4,950,498	4,368,373	5,936,927	6,156,701
Added value £	2,000,836	1,990,008	1,946,838	2,189,130	2,161,754
Scoured wool used .. lb.	11,960,882	17,333,386	16,393,522	19,125,620	16,250,885
Cotton used .. ,,	972,455	939,943	861,463	1,114,003	839,356
Tweed and cloth made sq. yds.	6,236,623	14,100,111	13,147,242	14,571,066	12,757,001
Flannel made .. ,, ,,	6,879,796	5,217,334	3,699,877	3,531,909	3,217,803
Blankets .. .. pairs	375,125	283,361	232,339	275,579	317,348
Rugs and shawls .. No.	126,603	110,096	123,124	132,906	129,340

Hosiery and Knitting.

Early records show that, in the year 1886–87, there were three hosiery factories in Victoria, employing 56 hands. The capital value of land, buildings and machinery was £2,080. The following table shows the main details relating to this industry for the past five years :—

HOSIERY AND KNITTING.

Item.	1932–33.	1933–34.	1934–35.	1935–36.	1936–37.
Number of establishments ..	218	224	219	225	208
Number of persons employed—					
Male	2,607	2,716	2,910	3,296	3,632
Female	6,666	6,789	7,001	7,354	7,964
Salaries and wages paid £	1,060,617	1,086,608	1,114,396	1,272,176	1,427,980
Value of land and buildings £	1,067,810	1,040,061	1,067,836	1,138,108	1,181,990
Value of plant and machinery £	1,074,540	1,093,676	1,115,739	1,143,572	1,273,751
Value of materials used £	2,058,773	2,183,607	2,137,824	2,369,985	2,564,249
Fuel, light, and power £	55,721	58,940	66,690	66,413	64,993
Value of goods produced £	4,017,717	4,405,344	4,290,652	4,969,671	5,213,388
Added value in manufacture £	1,827,358	2,080,212	2,000,930	2,437,339	2,460,934
Yarn used—					
Woollen .. lb.	3,919,823	4,039,583	4,015,316	4,140,712	3,674,751
Cotton .. „	1,219,207	2,012,872	2,071,621	2,515,851	2,406,832
Silk .. .. „	704,794	461,344	585,221	683,866	767,090
Artificial silk .. „	1,524,347	2,508,940	2,061,551	2,541,557	2,803,599
Stockings made doz. pair	892,426	999,884	1,082,106	1,194,036	*1,359,548
Socks made .. „ „	823,078	822,130	875,676	954,655	†1,006,454
Garments made .. Number	14,500,512	17,237,957	15,682,529	16,966,933	16,406,904

* Women's stockings only. † Includes men's socks and stockings, 775,443 doz. pair. Includes children's socks and stockings, 231,011 doz. pair.

Boots and Shoes.

Particulars relating to factories manufacturing boots and shoes are shown in the following table :—

Item.	1927–28.	1933–34.	1934–35.	1935–36.	1936–37.
Number of establishments ..	179	169	166	164	165
Number of persons employed	11,017	9,420	9,291	9,347	9,362
Horse-power of engines used ..	2,821	2,799	2,878	3,103	3,219
Value of plant, machinery, land, and buildings £	1,376,180	1,086,885	991,762	988,385	1,045,991
Salaries and wages paid £	1,906,127	1,280,728	1,279,738	1,301,816	1,354,623
Fuel, light, and power £	34,842	29,963	28,373	27,655	27,948
Value of materials used £	2,887,363	2,111,827	2,079,906	2,249,581	2,395,438
Value of output .. £	5,657,318	3,856,500	3,884,505	4,186,799	4,288,431
Boots and shoes made pairs	7,792,702	8,051,604	8,040,253	7,900,791	8,253,082
Slippers (including canvas shoes) made .. pairs	2,188,608	3,430,800	3,531,655	4,259,884	4,173,599

Dress (exclusive of boot) factories.

The value of the output of establishments connected with the manufacture of dress, i.e., clothing, tailoring, dressmaking, millinery, underclothing, hats and caps, &c., but exclusive of boots and shoes, was £16,655,155 in 1936–37, as compared with £14,707,061 in 1927–28. During the period 1927–28 to 1936–37 the persons employed increased by 22 per cent., the salaries and wages paid by 6 per cent., the value of materials used by 11 per cent., and the value of the output by 13 per cent. Particulars of the industry for each of the past ten years are as follows :

DRESS (EXCLUSIVE OF BOOT) FACTORIES, 1927–28 TO 1936–37.

Year.	Number of Factories.	Number of Persons Employed.			Salaries and Wages Paid.	Value of Materials Used.	Value of Output.
		Males.	Females.	Total.			
					£	£	£
1927–28	1,517	5,241	28,212	33,453	4,493,366	7,975,259	14,707,061
1928–29	1,522	5,433	28,272	33,705	4,541,295	8,426,982	15,505,660
1929–30	1,474	5,915	27,631	33,546	4,594,570	8,602,639	15,783,906
1930–31	1,405	5,361	22,162	27,523	3,492,542	6,333,943	11,698,487
1931–32	1,371	5,924	24,255	30,179	3,496,808	7,105,835	12,856,708
1932–33	1,445	6,760	27,432	34,192	3,791,163	7,744,205	13,920,069
1933–34	1,493	7,168	28,529	35,697	3,936,233	8,149,015	14,820,538
1934–35	1,540	7,694	30,246	37,940	4,236,961	8,228,047	15,082,449
1935–36	1,515	8,277	31,235	39,512	4,581,706	8,884,171	16,571,245
1936–37	1,417	9,828	30,981	40,809	4,770,768	8,831,838	16,655,155

Electric light and power works. Particulars relating to the electric light and power works of the State are given in the next table :—

ELECTRIC LIGHT AND POWER WORKS, 1927–28 TO 1936–37.

Year.	Number of Stations.	Value of Machinery and Plant.	Persons Employed.	Wages Paid.	Electricity Supplied.	Value of Output.
		£		£	Kilowatt Hours.	£
1926–27 ..	86	5,144,035	1,120	323,286	580,221,000	1,768,514
1927–28 ..	86	5,513,630	1,069	307,490	630,886,000	1,566,113
1928–29 ..	87	7,079,300	1,153	322,295	673,492,000	1,616,076
1929–30 ..	91	6,559,245	1,230	354,823	724,525,000	1,873,361
1930–31 ..	91	6,411,935	1,162	306,785	681,230,000	1,605,138
1931–32 ..	84	6,152,620	1,168	266,657	704,639,000	1,375,886
1932–33 ..	87	6,262,802	1,244	276,499	778,650,000	1,422,938
1933–34 ..	93	6,494,657	1,281	284,811	830,910,000	1,506,903
1934–35 ..	94	6,373,593	1,364	292,529	900,247,000	1,604,679
1935–36 ..	93	6,336,498	1,414	314,961	981,189,000	1,677,499
1936–37 ..	91	6,934,522	1,346	320,098	1,111,034,000	2,635,151

The reduction shown in the number of persons employed is probably due to a more rigid exclusion of employees engaged in the transmission and distribution of electricity. As output is valued at the generating station, costs of transmission, &c., are deducted.

STATE ELECTRICITY COMMISSION.

The State Electricity Commission was constituted by the *Electricity Commissioners Act* 1918 as amended by the *State Electricity Commission Act* 1920, now consolidated in the *State Electricity Commission Act* 1928. The Act provides for the

appointment, for terms not exceeding seven years, of a chairman and three commissioners. The Commission's duties cover—

1. Control of generation, supply and use of electricity in Victoria.
2. Investigation, and where practicable development, of all possible sources of power.
3. Promotion of the use of electricity.

The Commission is empowered to erect, acquire and operate electric undertakings and to operate any business associated therewith; to supply electricity to corporations and to persons outside areas in which there are existing undertakings, to frame safety regulations, register electrical contractors, and to issue licences for electrical mechanics. It controls its own funds and all officers and employees required for the operation of the Act.

A comprehensive transmission system has been established, based upon the brown coal deposits at Yallourn, where there is a station of 150,000 kw., in six turbo-alternators of 12,500 kw. and three of 25,000 kw. A fourth 25,000 kw. set will be in operation towards the end of 1938. This will complete the plan for the extension of the original station. Two 132,000 volt lines transmit energy to receiving stations at Richmond and Yarraville. A third station (Thomastown) receives the energy from the Sugarloaf–Rubicon group of hydro stations (35,410 h.p.) in the north-eastern district. There are two peak load stations in the metropolitan area, viz., Newport "B" and Richmond. Extensions to the boiler house at Newport "B" will bring the capacity up to 30,000 kw. in 1938.

The total kva. of the three main receiving stations is 224,400, in addition to which there are 22 central supply transmission sub-stations, aggregating 215,250 kva., 14 distribution sub-stations at line voltage, aggregating 33,800 kva, and 1,690 metropolitan and rural sub-stations, aggregating 233,525 kva; grand total, 706,975 kva. High tension lines aggregate 2,600 miles excluding 614 miles of underground cables. The Commission supplies practically the whole of the energy requirements of the metropolitan area of Melbourne, excluding the railways. It retails direct in twenty metropolitan municipalities, in addition to all the outer metropolitan centres.

The rural centres supplied by the Commission number over 283, of which 213 had no supply previously. On 1st July, 1934, it assumed full control of the Ballarat and Bendigo undertakings (including tramways).

The Commission also operates a briquette factory at Yallourn. This includes eight steam presses and twelve electric presses, the total capacity of which is 1,200 tons of brown coal briquettes a day. Two-thirds of the output is used for industrial, and the remainder for domestic purposes. By-product energy to the amount of about 8,000 kw. is supplied from the briquette factory to the distribution system at Yallourn Power Station.

Gasworks.

Particulars in regard to gasworks are given below for each of the past five years.

GASWORKS, 1932–33 TO 1936–37.

Year.	Number of Works.	Persons Employed.	Wages Paid.	Coal Used.	Gas Made.	Coke Produced.	Value of Output.
			£	tons	cubic feet.	tons.	£
1932–33 ..	36	696	161,189	298,536	5,550,860,000	180,950	1,388,643
1933–34 ..	37	705	158,115	305,945	5,539,553,000	184,671	1,367,662
1934–35 ..	38	714	163,265	325,602	5,922,690,000	199,745	1,315,751
1935–36 ..	39	785	184,739	352,324	6,196,556,000	224,444	1,496,610
1936–37 ..	39	724	186,489	355,141	6,338,359,200	209,968	1,367,838

Some inconsistency is shown in the movement of the statistics during 1936–37 as compared with the previous years. This can be ascribed to an alteration in the form used for the collection of this data. More detailed statistics relating to the costs of transmission and distribution were thereby obtained, thus enabling a more accurate estimate of the value of output at the gasworks to be made.

Oil was used as well as coal in the manufacture of gas, the number of gallons consumed each year being 1,096,539 in 1932–33, 957,038 in 1933–34, 1,210,733 in 1934–35, 1,128,140 in 1935–36, and 1,240,305 in 1936–37.

Factory output by classes.

The following table is an analysis of factory statistics designed to show the relative importance of the various classes of manufacturing in Victoria.

VALUE OF ARTICLES PRODUCED IN FACTORIES.

Class of Industry.	1932–33.	1933–34.	1934–35.	1935–36.	1936–37.
	£	£	£	£	£
1. Treatment of non-metalliferous mine and quarry products	1,349,749	1,609,828	1,846,480	2,308,109	2,445,353
2. Bricks, pottery, glass, &c.	1,054,693	1,250,330	1,566,137	1,878,773	2,018,926
3. Chemicals, dyes, explosives, paint, oils, and grease	6,382,992	6,584,564	7,085,892	7,850,284	9,073,976
4. Industrial metals, machines, implements, and conveyances ..	14,069,424	15,715,541	18,745,029	22,565,640	26,849,850
5. Precious metals, jewellery, and plate	523,765	600,207	726,806	904,487	917,674
6. Textiles and textile goods (not dress)	10,282,202	11,161,963	10,587,501	13,087,825	14,262,943
7. Skins and leather (not clothing or footwear)	3,859,066	5,188,915	4,142,328	4,257,914	4,547,047
8. Clothing	13,961,676	14,672,976	15,091,802	16,123,208	16,021,980
9. Food, drink, and tobacco	33,581,795	33,049,707	36,589,677	42,817,086	41,770,149
10. Woodworking and basket ware	2,792,163	3,070,356	3,805,889	4,290,263	5,066,362
11. Furniture, bedding, &c.	1,411,764	1,642,817	1,928,725	2,448,374	2,573,992
12. Paper, stationery, printing, bookbinding, &c.	6,537,980	6,979,377	7,362,094	7,725,011	8,182,693
13. Rubber	2,382,523	2,807,433	3,399,448	3,047,269	3,455,116
14. Musical instruments ..	69,329	68,787	29,499	33,078	30,888
15. Miscellaneous products ..	1,005,673	1,207,074	1,343,750	1,522,377	1,472,254
16. Heat, light, and power ..	2,820,635	2,886,435	2,931,800	3,183,472	4,002,989
Total	102,085,429	108,496,310	117,182,857	134,043,170	142,692,192

Employment in factories. The average number of persons employed in each class of industry is shown hereunder. The method of arriving at this average was altered in the year 1928-29, and it is now taken as the average number employed over the whole year, and not, as formerly in the case of a seasonal factory working only for a portion of the year, the average for the period of operation.

The table of monthly employment in factories (see page 524) is designed to show seasonal employment.

AVERAGE NUMBER OF PERSONS EMPLOYED IN FACTORIES.

Class of Industry.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
1. Treatment of non-metalliferous mine and quarry products	1,511	1,800	1,943	2,217	2,630
2. Bricks, pottery, glass, &c. ..	2,341	2,922	3,467	4,008	4,244
3. Chemicals, dyes, explosives, paint, oils, and grease ..	5,017	5,393	6,215	6,870	7,342
4. Industrial metals, machines, implements, and conveyances	28,782	32,174	37,518	43,573	48,194
5. Precious metals, jewellery, and plate	1,229	1,445	1,665	1,994	2,102
6. Textiles and textile goods (not dress)	20,213	21,460	22,070	24,158	25,467
7. Skins and leather (not clothing or footwear) ..	3,914	4,415	4,402	4,689	4,925
8. Clothing	34,620	36,432	38,129	38,897	37,953
9. Food, drink, and tobacco ..	21,013	22,014	23,237	24,426	25,902
10. Woodworking and basketware	5,146	5,851	6,896	7,313	7,289
11. Furniture, bedding, &c. ..	2,904	3,359	3,819	4,330	4,565
12. Paper, stationery, printing, bookbinding, &c. ..	10,943	11,677	12,349	12,979	13,350
13. Rubber	3,040	3,427	3,760	3,327	2,759
14. Musical instruments ..	191	192	92	97	96
15. Miscellaneous products ..	1,621	1,782	2,045	2,307	2,495
16. Heat, light, and power ..	1,943	1,991	2,084	2,205	2,070
Total	144,428	156,334	169,691	183,390	191,383

The above table shows that there has been a substantial recovery in factory employment since the year 1930-31, when severely depressed conditions prevailed. Since then the number of persons employed in factories has increased by 51·87 per cent.

Size of factories.

An interesting feature of the next table is the substantial increase shown in factories of over 50 hands and of the persons employed therein. In 1932–33 the total number employed in factories of this size group was 83,741, representing 56·8 per cent., whilst in 1936–37 this total had increased to 118,626, or 61·6 per cent. of the total number employed in factories.

FACTORIES ACCORDING TO NUMBER OF HANDS EMPLOYED.

	Showing Annual Percentage Increase or Decrease.									
	1932–33.	Increase.	1933–34.	Increase.	1934–35.	Increase.	1935–36.	Increase.	1936–37.	Increase.
		%		%		%		%		%
Under 4 hands—										
Number of Factories	3,523	4·5	3,471	− 1·5	3,405	− 1·9	3,312	− 2·7	3,263	− 1·5
,, Employees	6,162	5·1	6,136	− 0·4	6,352	3·5	6,248	− 1·6	6,153	− 1·5
4 hands—										
Number of Factories	703	−2·0	746	6·1	830	11·3	826	− 0·5	777	− 5·9
,, Employees	2,812	−2·0	2,984	6·1	3,320	11·3	3,304	− 0·5	3,108	− 5·9
5 to 10 hands—										
Number of Factories	2,033	3·3	2,188	7·6	2,170	− 0·8	2,194	1·1	2,189	− 0·2
,, Employees	13,933	4·2	15,004	7·7	15,130	0·8	15,314	1·2	15,291	− 0·2
11 to 20 hands—										
Number of Factories	978	5·6	1,030	5·3	1,062	3·1	1,136	7·0	1,209	6·4
,, Employees	14,478	6·0	15,280	5·5	15,704	2·8	16,820	7·1	17,759	5·6
21 to 50 hands—										
Number of Factories	837	8·9	877	4·8	1,006	14·7	997	− 0·9	998	0·1
,, Employees	26,407	10·9	27,832	5·4	31,547	13·3	31,673	0·4	31,755	0·3
51 to 100 hands—										
Number of Factories	293	22·6	314	7·2	332	5·7	369	11·1	384	4·1
,, Employees	20,069	20·6	21,736	8·3	23,033	6·0	25,297	9·8	26,499	4·8
Over 100 hands—										
Number of Factories	245	14·0	270	10·2	295	9·3	326	10·5	345	5·8
,, Employees	63,672	17·2	69,864	9·7	77,185	10·5	86,410	12·0	92,127	6·6

PROPORTION OF FACTORIES OF DIFFERENT SIZES.

Size of Factory.	Percentage to Total.									
	1932–33.		1933–34.		1934–35.		1935–36.		1936–37.	
	Factories.	Employees.	Factories.	Employees.	Factories.	Employees.	Factories.	Employees.	Factories.	Employees.
Under 4 hands ..	40·9	4·2	39·0	3·9	37·4	3·7	36·2	3·4	35·6	3·2
4 ,, ..	8·2	1·9	8·4	1·9	9·1	1·9	9·0	1·8	8·5	1·6
5 to 10 ,, ..	23·6	9·4	24·6	9·4	23·8	8·8	23·9	8·3	23·9	7·9
11 to 20 ,, ..	11·4	9·8	11·6	9·6	11·7	9·1	12·4	9·1	13·1	9·2
21 to 50 ,, ..	9·7	17·9	9·9	17·5	11·1	18·3	10·9	17·1	10·9	16·5
51 to 100 ,, ..	3·4	13·6	3·5	13·7	3·6	13·4	4·0	13·6	4·2	13·8
101 and over ..	2·8	43·2	3·0	44·0	3·3	44·8	3·6	46·7	3·8	47·8
Total ..	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0

Occupations in factories. In the following table the persons employed in factories are grouped according to their occupational status :—

OCCUPATIONS OF PERSONS EMPLOYED IN FACTORIES.

Occupations.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
Working proprietors	7,097	7,579	8,009	8,040	8,032
Managers, overseers	5,372	5,557	5,662	6,025	6,402
Accountants, clerks	6,585	7,059	7,861	8,483	9,588
Engine-drivers, firemen ..	1,612	1,693	1,757	1,808	1,877
Workers in factory or works..	122,108	132,579	144,186	156,494	163,099
Outworkers	178	164	143	142	176
Carters, messengers	1,196	1,207	1,344	1,444	} 2,209
Others	280	496	729	954	
Total	144,428	156,334	169,691	183,390	191,383

Outworkers. The term "outworkers" used in the above table relates to factory workers working in their own homes, but does not include individuals working for themselves. The employment of outworkers is regulated by a special provision of the Factories and Shops Act. They are required to register their names and addresses with the Chief Inspector of Factories, and factory proprietors are forbidden to give work to those who are not registered.

Sex distribution in factories. The average numbers of males and females employed in factories and their proportions to the male and female populations, for the years 1927-28 to 1936-37, were as follows :—

EMPLOYMENT OF MALES AND FEMALES IN FACTORIES.

Year.	Males.		Females.		Total.	
	Number.	Average per 10,000 of Male Population.	Number.	Average per 10,000 of Female Population.	Number.	Average per 10,000 of Total Population.
1927-28 ..	108,068	1,246	52,289	598	160,357	921
1928-29 ..	104,648	1,195	51,920	586	156,568	889
1929-30 ..	100,135	1,136	50,874	568	151,009	850
1930-31 ..	82,949	936	43,067	476	126,016	704
1931-32 ..	81,618	917	46,647	512	128,265	712
1932-33 ..	91,899	1,020	52,529	575	144,428	796
1933-34 ..	100,959	1,115	55,375	602	156,334	857
1934-35 ..	110,910	1,219	58,781	634	169,691	924
1935-36 ..	121,734	1,335	61,656	662	183,390	995
1936-37 ..	128,457	1,403	62,926	672	191,383	1,033

Of the total persons employed, males formed 67·4 per cent. in 1927–28 and 67·1 per cent. in 1936–37. During the period 1927–28 to 1936–37 the number of males employed increased by 20,389, or 18·9 per cent., and the number of females employed, by 10,637 or 20·3 per cent.

Employment of females.

Of the total females in factories, 67·8 per cent. are engaged in the textile and clothing industries and 11·2 per cent. in the preparation of food and drink. The extent of female employment in certain industries is shown in the next table :—

FEMALE EMPLOYMENT IN FACTORIES, 1936–37.

Industry.	Number Employed.		Females per 100 Males.
	Males.	Females.	
Chemicals, drugs, &c.	874	805	92
Explosives	1,276	472	37
Matches	217	517	238
Dyeworks and cleaning	430	476	111
Cotton	572	1,045	183
Woollen mills	4,892	5,144	105
Hosiery and knitting	3,632	7,964	219
Silk, natural and artificial	163	305	187
Rope, cordage	699	323	46
Furriers and fur dressing	387	400	103
Bags, trunks, &c.	408	567	139
Tailoring and slop clothing ..	1,933	6,220	322
Dressmaking	572	7,467	1,305
Millinery	114	1,273	1,117
Shirts, underclothing, corsets ..	449	4,469	995
Hats and caps	661	742	112
Boots and shoes	4,610	4,752	103
Biscuits	544	572	105
Confectionery	1,262	1,595	126
Jams, pickles, &c.	1,474	1,394	95
Tobacco, cigarettes, &c.	852	1,167	137
Envelopes, stationery, &c.	416	685	165
General printing and bookbinding ..	4,103	1,562	38
Rubber goods	1,997	762	38
All other factories	95,920	12,248	13
Total	128,457	62,926	49

Child labour in factories.

The main reason for the small proportion of children engaged in factories is that daily attendance at school is compulsory between the ages of 6 and 14 years.

A further contributing cause is the restriction imposed by the Victorian Factories Act on the employment of female children under the age of 15 years unless a special permit is granted by the Chief Inspector of Factories on the grounds of poverty or hardship.

CHILDREN EMPLOYED IN FACTORIES.

Year.	* Boys under 16.	Girls under 16.	Total Children.	Proportion per cent. of—		
				Boys to Males Employed.	Girls to Females Employed.	Children to Total Employed.
1927–28 ..	4,231	3,992	8,223	3·91	7·63	5·13
1928–29 ..	4,209	4,298	8,507	4·29	8·39	5·70
1929–30 ..	3,748	4,019	7,767	3·74	7·90	5·14
1930–31 ..	2,543	3,361	5,904	3·07	7·80	4·69
1931–32 ..	2,615	4,089	6,704	3·20	8·77	5·23
1932–33 ..	3,441	4,643	8,084	3·74	8.84	5·60
1933–34 ..	4,247	5,635	9,882	4·21	10·18	6·32
1934–35 ..	5,194	6,015	11,209	4·68	10·23	6·61
1935–36 ..	6,118	6,002	12,120	5·03	9·73	6·61
June 15th, 1937	6,213	5,298	11,511	4·76	8·54	5·97

Prior to 1936–37, the proportions were based on the average numbers employed over the whole year. The last line of the table shows the number of children employed on 15th June, 1937, and the proportions to the total number employed on that date. The change is due to an alteration in the data collected.

Machinery in factories. In the following tables are shown the number of factories using mechanical power, and the value of the machinery and plant for the ten years 1927–28 to 1936–37.

MACHINERY IN FACTORIES.

Year.	Number of Factories equipped with Machinery.	Value of Machinery and Plant.	Average Horse-power used.
		£	
1927–28	7,209	32,745,680	329,236
1928–29	7,305	33,724,910	350,953
1929–30	7,419	35,022,535	359,952
1930–31	7,519	34,771,687	333,066
1931–32	7,617	33,481,615	340,653
1932–33	8,023	33,022,441	364,121
1933–34	8,238	33,270,400	389,186
1934–35	8,445	33,947,056	404,702
1935–36	8,480	34,194,608	441,445
1936–37	8,538	36,213,626	*748,224

* "Rated Horse-power." See following table relating to Horse-power.

The nature of the motive power used in the factories of the State is set out in the next table. Establishments using more than one kind of mechanical power are included once only in the table, usually under the power which is principally used.

POWER USED IN FACTORIES, 1927-28 TO 1936-37.

Year.	Number of Factories using—					
	Steam.	Gas.	Electricity.	Oil.	Water, Wind, or Horses.	Manual Labour.
1927-28 ..	618	334	5,701	509	12	1,036
1928-29 ..	579	278	5,941	493	14	892
1929-30 ..	539	223	6,142	490	25	776
1930-31 ..	502	228	6,279	499	11	680
1931-32 ..	479	213	6,426	493	6	587
1932-33 ..	485	197	6,840	493	8	589
1933-34 ..	491	174	7,074	492	7	658
1934-35 ..	477	180	7,279	499	10	655
1935-36 ..	458	160	7,341	512	9	680
1936-37	402	171	7,465	489	11	627

Horse-power of Engines.

The difficulty of obtaining an accurate measure of average horse-power of engines used in factories has been pointed out in previous issues of this *Year-Book*. In 1937 Australian Statisticians decided to discard this measure of horse-power and to substitute the "rated" horse-power of engines, (*a*) ordinarily in use and (*b*) in reserve or idle. A summary of the details collected in 1936-37 follows :—

HORSE-POWER OF ENGINES, 1936-37.

Class of Engine.	Generating Stations.	Other Factories.	Total.
Steam—			
Reciprocating	1,593	37,538	39,131
Turbine	374,995	24,613	399,608
Internal Combustion—			
Gas	2,940	6,302	9,242
Petrol or other light oils	620	3,487	4,107
Heavy oils	40,244	9,686	49,930
Water	35,570	558	36,128
Total	455,962	82,184	538,146
Electric motors driven by—			
(*a*) Electricity generated in own works ..	20,859	30,056	50,915
(*b*) Purchased electricity	1,410	238,668	240,078
Grand Total	478,231	350,908	829,139

Reserve or idle horse-power capacity amounted to 102,101, exclusive of that in heat, light, and power generating stations.

Wages in Factories.

The total amount and the average amount of salaries and wages paid to persons employed in factories are given in the following table for each of the past ten years.

SALARIES AND WAGES PAID IN FACTORIES.

Year.	Drawings by Working Proprietors (excluding Profits).		Salaries Paid to Managers and Clerks.		Wages Paid to Factory Workers.		Total Salaries and Wages Paid.
	Males.	Females.	Males.	Females.	Males.	Females.	
			Aggregate Amounts.				
	£	£	£	£	£	£	£
1927-28..	1,954,036	102,663	3,353,582	532,265	20,915,338	5,229,167	32,087,051
1928-29..	1,965,990	100,829	3,416,012	552,056	20,268,582	5,230,117	31,533,586
1929-30..	2,032,445	97,250	3,395,311	554,149	19,293,295	5,145,085	30,517,535
1930-31..	1,819,904	100,294	2,955.747	485,137	14,042,377	3,876,230	23,279,689
1931-32..	1,705,796	98,758	2,679,923	455,454	12,425,431	3,893,237	21,258,599
1932-33..	1,774,820	103,421	2,775,190	480,551	13,821,827	4,140,703	23,096,512
1933-34..	1,858,005	109,489	2,932,119	506,467	15,077,479	4,335,584	24,819,143
1934-35..	1,918,021	125,780	3,111,666	542,939	16,924,648	4,695,761	27,318,815
1935-36..	2,008,313	129,366	3,345,721	588,515	19,409,390	5,112,402	30,593,707
1936-37..	2,070,557	155,452	3,755,443	691,602	21,208,444	5,331,406	33,192,904
			Average Amounts.				
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1927-28..	278 14 11	137 16 0	367 14 4	154 7 7	227 11 3	108 14 5	196 15 9*
1928-29..	298 15 8	139 13 0	374 11 3	155 7 7	227 17 5	109 15 5	197 8 3*
1929-30..	321 1 8	153 12 8	386 10 8	157 14 10	226 18 6	110 2 2	197 1 6*
1930-31..	290 6 1	163 12 3	364 9 2	145 13 9	204 15 9	99 1 6	179 5 10*
1931-32..	275 7 11	165 8 6	345 7 11	136 11 4	183 12 7	91 2 11	160 3 0*
1932-33..	275 5 0	159 7 1	334 9 7	131 6 0	179 2 11	85 17 5	154 10 1*
1933-34..	269 12 7	159 2 10	334 10 6	131 10 4	176 15 1	85 5 9	153 12 5*
1934-35..	264 3 1	168 3 1	335 13 5	127 13 3	179 6 7	87 6 4	156 6 6*
1935-36..	275 1 6	175 1 1	335 14 11	129 10 10	185 15 10	90 13 9	162 5 8*
1936-37..	286 5 4	169 10 7	343 7 5	136 17 5	192 6 1	93 8 3	169 0 1*

* This figure is based on the number of employees and the wages, &c., paid to them, working proprietors being excluded.

The average wage paid to all employees (excluding working proprietors) increased by £6 14s. 5d. in 1936-37.

The method of arriving at the average number of employees since the year 1928-29 (see page 504) would tend to increase the average wage paid to an amount slightly greater than that in previous years.

The average wage for 1936–37 (£169 0s. 1d.) was probably below the average according to the determinations of Wages Boards. This would be mainly accounted for by the fact that the former sum is based on the actual payments to workers, while the latter represents the average of the sums to which they would have been entitled if they had worked throughout the whole year. There is, of necessity, a difference between the two averages, as all hands are not continuously employed, nor are all factories working throughout the whole year.

Cost and value of production in factories.

The cost of production and the value of the output in each class of manufacturing industry during the year 1936–37 are given in the subjoined statement :—

FACTORY COSTS AND OUTPUT, 1936–37.

Class of Industry.	Cost of—				Value of Output.
	Raw Materials Used (including Containers).	Fuel, Light, and Power Used.	Salaries and Wages Paid.	Tools replaced, Repairs to Plant, Oil and Water Used.	
	1.	2.	3.	4.	5.
	£	£	£	£	£
1. Treatment of non-metalliferous mine and quarry products	854,911	200,202	551,536	110,450	2,445,353
2. Bricks, pottery, glass, &c.	330,404	247,389	826,071	92,656	2,018,926
3. Chemicals, dyes, explosives, paint, oils, and grease	4,753,746	192,481	1,412,711	193,575	9,073,976
4. Industrial metals, machines, implements, and conveyances ..	11,854,598	504,948	9,654,505	433,231	26,849,850
5. Precious metals, jewellery, and plate	391,863	14,338	358,214	9,002	917,674
6. Textiles and textile goods (not dress)	7,896,653	269,228	3,279,100	320,782	14,262,943
7. Skins and leather (not clothing or footwear) ..	2,943,569	54,689	878,986	64,964	4,547,047
8. Clothing	8,736,832	118,363	4,814,593	116,459	16,021,980
9. Food, drink, and tobacco	29,663,615	665,320	5,115,093	527,716	41,770,149
10. Woodworking and basketware	2,736,813	65,577	1,444,628	78,119	5,066,362
11. Furniture, bedding, &c. ..	1,385,879	25,125	716,967	17,014	2,573,992
12. Paper, stationery, printing, bookbinding, &c. ..	3,397,264	174,655	2,690,581	133,324	8,182,693
13. Rubber	1,949,025	105,232	539,781	127,684	3,455,116
14. Musical instruments ..	8,041	256	19,354	88	30,888
15. Miscellaneous products ..	734,756	21,463	384,197	24,668	1,472,254
16. Heat, light, and power ..	595,063	642,912	506,587	194,969	4,002,989
Total	78,233,032	3,302,178	33,192,904	2,444,701	142,692,192

The difference between the sum of the first four columns and the last column represents the amount available for miscellaneous expenses, interest, and profit. The proportions which this margin and the chief items of the cost of production bear to the total value of production in each class of industry are shown in the following table :—

PROPORTIONATE VALUE OF COSTS, ETC., TO PRODUCTION IN FACTORIES, 1936–37.

Class of Industry.	Percentage of Costs, &c., to Total Value of Output.				
	Materials Used, including Containers.	Fuel, Light, &c.	Wages.	Tools Replaced, Repairs to Plant, Oil and Water Used.	All other Expenditure, Interest and Profit.
	%	%	%	%	%
1. Treatment of non-metalliferous mine and quarry products	35·0	8·2	22·5	4·5	29·8
2. Bricks, pottery, glass, &c.	16·4	12·2	40·9	4·6	25·9
3. Chemicals, dyes, explosives, paint, oils, and grease	52·4	2·1	15·6	2·1	27·8
4. Industrial metals, machines, implements, and conveyances	44·2	1·9	35·9	1·6	16·4
5. Precious metals, jewellery, and plate	42·7	1·6	39·0	1·0	15·7
6. Textiles and textile goods (not dress)	55·4	1·9	23·0	2·2	17·5
7. Skins and leather (not clothing or footwear) ..	64·7	1·2	19·4	1·4	13·3
8. Clothing	54·5	0·7	30·1	0·7	14·0
9. Food, drink, and tobacco	71·0	1·6	12·2	1·3	13·9
10. Woodworking and basketware	54·0	1·3	28·5	1·5	14·7
11. Furniture, bedding, &c. ..	53·8	1·0	27·8	0·7	16·7
12. Paper, stationery, printing, bookbinding, &c. ..	41·5	2·1	32·9	1·6	21·9
13. Rubber	56·4	3·1	15·6	3·7	21·2
14. Musical instruments ..	26·0	0·8	62·7	0·3	10·2
15. Miscellaneous products ..	49·9	1·5	26·1	1·7	20·8
16. Heat, light, and power ..	14·9	16·1	12·6	4·9	51·5
Total	54·8	2·3	23·3	1·7	17·9

There are considerable variations in the proportions which the cost of materials and the expenditure on wages bear to the value of the output in the different classes of industries. These are, of course, due to the difference in the treatment required to convert the raw material to its manufactured form. Thus, in class two, the sum paid in wages represents 40·9 per cent. and the cost of raw materials 16·4 per cent. of the value of the finished article, whilst, in class nine, the expenditure on wages amounts to 12·2 per cent. and that on raw materials to 71 per cent. of the value of the output.

Cost of production, 1927-28 to 1936-37.

In the next table the cost of production, the value of the output of factories, and the balance available for profit and miscellaneous expenses are compared for the years 1927–28 to 1936–37.

COST OF PRODUCTION AND VALUE OF OUTPUT OF FACTORIES, 1927–28 TO 1936–37.

Year.	Cost of Production.					Total value of Output.
	Materials.	Fuel, Light, and Power.	Salaries and Wages.	Tools Replaced, Repairs to Plant, Oil and Water Used.	All other Expenditure, Interest, and Profit.	
	£	£	£	£	£	£
1927-28 ..	69,637,778	3,433,923	32,087,051	1,595,351	21,711,214	128,465,317
1928-29 ..	70,100,456	3,361,298	31,533,586	1,410,430	21,491,693	127,897,463
1929-30 ..	66,770,302	3,435,727	30,517,535	1,345,702	20,741,833	122,811,099
1930-31 ..	50,380,110	2,589,475	23,279,689	1,042,242	16,134,279	93,425,795
1931-32 ..	51,727,685	2,443,539	21,258,599	1,397,765	16,561,029	93,388,617
1932-33 ..	56,757,681	2,633,659	23,096,512	1,612,987	17,984,590	102,085,429
1933-34 ..	59,776,270	2,765,971	24,819,143	1,752,424	19,382,502	108,496,310
1934-35 ..	63,387,061	3,011,127	27,318,815	2,022,078	21,443,776	117,182,857
1935-36 ..	74,568,265	3,145,097	30,593,707	2,286,118	23,449,983	134,043,170
1936-37 ..	78,233,032	3,302,178	33,192,904	2,444,701	25,519,377	142,692,192

These figures are reduced in the succeeding statement to their respective percentages of the total output.

PROPORTION OF OUTLAY TO OUTPUT OF FACTORIES, 1927-28 TO 1936-37.

Year.	Proportion of Outlay to Output.					Total.
	Materials.	Fuel, Light, and Power.	Salaries and Wages.	Tools Replaced, Repairs to Plant, Oil and Water Used.	Other Expenditure Interest, and Profit.	
	%	%	%	%	%	%
1927-28 ..	54·2	2·7	25·0	1·2	16·9	100·0
1928-29 ..	54·8	2·6	24·7	1·1	16·8	100·0
1929-30 ..	54·4	2·8	24·8	1·1	16·9	100·0
1930-31 ..	53·9	2·8	24·9	1·1	17·3	100·0
1931-32 ..	55·4	2·6	22·8	1·5	17·7	100·0
1932-33 ..	55·7	2·6	22·5	1·6	17·6	100·0
1933-34 ..	55·1	2·5	22·9	1·6	17·9	100·0
1934-35 ..	54·1	2·6	23·3	1·7	18·3	100·0
1935-36 ..	55·6	2·4	22·8	1·7	17·5	100·0
1936-37 ..	54·8	2·3	23·3	1·7	17·9	100·0

The ratio of salaries and wages to the value of the output of factories was 23 per cent. on the average of the last five years, as against 24·5 per cent. in the period 1927-28 to 1931-32. The cost of materials was 55 per cent. of the value of output in the period 1932-33 to 1936-37, as against 54·5 per cent. in the years 1927-28 to 1931-32. The proportionate outlay on fuel, light, and power was 2·7 per cent. in the earlier and 2·5 per cent. in the later period. After allocating the proportion for repairs to plant and buildings, replacement of tools, and costs of lubricating oil and water, the balance available for miscellaneous expenses, rent, interest, and manufacturers' profit was £17 16s. 7d. in every £100 of the total output value in the period 1932-33 to 1936-37, as compared with £17 1s. 6d. in the preceding five-year period.

In 1936-37, wages and salaries (including working proprietors' drawings) took 56·5 per cent. of the value added in manufacturing (see page 481), leaving 43·5 per cent. for the payment of miscellaneous expenses, rent, interest, and profits.

Capital invested in manufacturing plant and premises.

In the following statement the amount of capital invested in machinery, plant, land and buildings used in connexion with the various classes of manufacturing industries is shown for the year 1936-37.

MACHINERY AND PLANT; LAND AND BUILDINGS USED IN MANUFACTURING INDUSTRIES, 1936–37.

Class of Industry.	Value of Machinery and Plant.	Value of Land and Buildings.
	£	£
1. Treatment of non-metalliferous mine and quarry products	1,638,316	805,424
2. Bricks, pottery, glass, &c.	811,936	736,290
3. Chemicals, dyes, explosives, paint, oils, and grease	2,575,762	2,788,955
4. Industrial metals, machines, implements, and conveyances	5,294,369	8,328,919
5. Precious metals, jewellery, and plate ..	103,936	294,603
6. Textiles and textile goods (not dress) ..	3,805,782	3,093,045
7. Skins and leather (not clothing or footwear)	358,203	926,931
8. Clothing	1,183,805	4,369,901
9. Food, drink, and tobacco	6,676,623	9,047,184
10. Woodworking and basketware	894,908	981,942
11. Furniture, bedding, &c.	201,186	819,478
12. Paper, stationery, printing, bookbinding, &c.	2,698,890	3,172,338
13. Rubber	808,248	722,233
14. Musical instruments	4,681	32,349
15. Miscellaneous products	262,613	454,011
16. Heat, light, and power	8,894,368	2,374,665
Total	36,213,626	38,948,268

The capital invested in plant, buildings, &c., used in connexion with three classes of industry—food and drink, industrial metals, &c., and heat, light, and power—amounted, in the year under review, to £40,616,128, or more than one-half of the total for all manufacturing industries.

The values of machinery and plant and of land and buildings used in connexion with manufacturing industries are shown in the next table for the years 1927–28 to 1936–37 :—

MACHINERY AND PLANT, LAND, AND BUILDINGS USED IN MANUFACTURING INDUSTRIES, 1927–28 TO 1936–37.

Year.	Value of Machinery and Plant.	Value of Land and Buildings.
	£	£
1927–28	32,745,680	34,761,340
1928–29	33,724,910	36,184,460
1929–30	35,022,535	36,988,485
1930–31	34,771,687	36,218,384
1931–32	33,481,615	34,868,960
1932–33	33,022,441	34,804,987
1933–34	33,270,400	35,563,879
1934–35	33,947,056	36,644,621
1935–36	34,194,608	37,678,298
1936–37	36,213,626	38,948,268

It will be seen from these figures that the values of machinery, plant, land and buildings increased by 11·3 per cent. between 1927–28 and 1936–37.

Accidents in factories.

In the appended table the number of accidents in factories is given for the past ten years. The particulars in the table relate to establishments which came within the scope of the Factories Acts in force in the years specified, and not to those classified for statistical purposes in the preceding tables.

ACCIDENTS IN FACTORIES, 1927 TO 1936.

Year.	Number of Employees.	Number of Accidents.	Percentage of Accidents to Number of Employees.
1927	136,022	1,348	·991
1928	137,244	1,224	·891
1929	136,025	1,129	·829
1930	104,926	890	·848
1931	110,692	677	·611
1932	125,670	809	·644
1933	134,842	956	·709
1934	148,155	1,162	·784
1935	159,912	1,290	·807
1936	170,084	1,513	·889

Manufactures—Penal Department and Blind Institute.

The foregoing tables do not include particulars relating to work of various kinds done at the Pentridge Penal Establishment and the Royal Victorian Institute for the Blind. At the former establishment the manufacture of wire netting, clothing, brushware, boots, mats, blankets, flannel, underclothing, and printing are carried on. The estimated value of the output for 1936–37 was £47,791, and, of the materials used, £33,270. The articles produced are used principally by Government Departments. The work carried on by the latter establishment is the manufacture of brushware, brooms, basketware, mats, and matting, and gives employment to 162 persons (140 males and 22 females). The value of the work turned out for the period under review was £42,400.

Factory Statistics by Municipalities.

Although approximately 70 per cent. of the factories in Victoria are located within the Metropolitan area of Greater Melbourne, some of the rural municipalities also have important manufacturing industries.

The following table gives factory statistics in metropolitan and the larger rural municipalities for the year 1936–37.

FACTORY STATISTICS BY MUNICIPALITIES, 1936-37.

Municipality.	Number of Factories.	Persons Employed.		Salaries and Wages Paid.	Value of Land and Buildings.	Value of Plant and Machinery.	Value of Materials Used.	Value of Articles Produced or Work Done.
		Males.	Females.					
				£	£	£	£	£
Melbourne	2,326	28,778	22,445	8,714,827	10,538,977	5,108,375	18,022,563	34,578,039
Brunswick	334	5,820	4,667	1,489,315	1,259,399	1,060,678	2,406,643	5,218,416
Essendon	119	503	272	129,908	168,617	99,308	268,394	456,314
Coburg	93	1,676	1,402	430,873	316,870	325,862	945,893	1,795,134
Preston	76	1,793	320	421,196	536,682	220,275	868,132	1,523,973
Northcote	111	1,156	360	255,655	298,196	143,538	463,842	906,086
Fitzroy	338	5,286	3,538	1,398,558	1,263,071	847,204	2,630,619	4,846,703
Collingwood	376	9,152	7,725	2,477,275	2,296,809	1,924,593	5,336,603	9,437,924
Kew	44	135	65	33,511	66,690	28,223	53,852	108,681
Camberwell	93	456	290	125,756	191,111	62,949	142,132	364,651
Hawthorn	175	1,012	674	270,998	359,619	190,537	392,355	863,011
Richmond	330	8,750	4,834	2,250,543	2,328,981	1,939,962	4,487,457	10,368,559
Prahran	324	2,668	2,414	791,432	902,144	371,385	1,924,724	3,394,872
Malvern	142	596	229	141,742	203,968	63,128	241,720	453,250
Caulfield	144	575	150	125,144	167,477	56,740	211,364	390,146
Oakleigh	22	363	11	76,882	88,150	104,094	99,167	265,627
Sandringham	42	209	247	65,775	88,118	22,814	119,484	234,274
Brighton	90	547	381	142,284	172,859	204,023	216,962	489,427
St. Kilda	134	942	429	231,964	242,444	92,458	352,322	759,966
South Melbourne	457	12,336	3,051	2,971,033	2,883,651	2,061,220	6,039,576	11,839,204
Port Melbourne	78	2,052	514	481,924	591,139	485,234	1,370,271	2,688,525
Footscray	221	7,912	1,633	1,891,611	2,332,401	2,953,030	7,407,687	11,475,686
Williamstown	74	5,527	271	1,265,281	1,915,924	2,815,749	2,174,382	4,387,928
Braybrook	52	4,127	672	1,006,990	1,080,584	1,037,839	1,907,000	3,719,122
Heidelberg	56	685	183	166,372	242,831	396,546	591,360	1,116,118
Box Hill	45	490	118	104,758	111,416	135,895	178,013	347,514
Moorabbin	34	239	98	52,752	68,866	47,971	92,624	170,037
Mordialloc	22	68	20	13,690	26,550	28,605	22,758	49,553
Chelsea	11	87	6	12,884	16,989	5,021	21,439	39,478

Factory Statistics by Municipalities, 1936-37—*continued.*

Municipality.	Number of Factories.	Persons Employed.		Salaries and Wages Paid.	Value of Land and Buildings.	Value of Plant and Machinery.	Value of Materials Used.	Value of Articles Produced or Work Done.
		Males.	Females.					
				£	£	£	£	£
Werribee	21	152	3	36,765	143,365	178,341	456,788	833,341
Blackburn and Mitcham ..	28	450	74	89,529	76,745	76,577	52,295	235,861
Dandenong	33	652	67	143,771	140,776	147,987	407,061	643,966
*Geelong	250	5,623	1,968	1,397,681	2,054,668	2,217,054	2,858,486	5,906 861
Castlemaine	25	598	142	157,871	65,131	157,099	192,422	429,810
†Ballarat	218	2,233	1,132	555,827	661,038	578,334	1,306,955	1,943,637
Colac	59	369	27	80,489	122,744	104,403	547,911	688,047
Hampden	36	336	27	76,409	99,079	97,959	659,260	851,973
†Warrnambool	62	661	166	237,051	451,022	459,194	1,069,938	1,498,157
Hamilton	43	191	27	40,442	41,990	36,415	126,350	214,562
Horsham	38	192	19	39,856	94,403	68,705	180,528	243,844
†Stawell	46	277	116	63,609	47,538	95,485	190,481	303,123
Dimboola	35	111	4	19,961	25,156	41,799	105,454	138,689
†Mildura	86	824	211	183,788	208,348	212,258	234,519	542,865
Swan Hill	55	247	35	52,199	69,217	75,713	174,462	272,628
Bendigo (including Eaglehawk)	158	933	506	227,606	229,794	207,334	625,389	1,008,435
Rodney	36	297	187	96,855	128,776	103,373	528,962	747,045
†Shepparton	52	428	145	115,001	239,937	96,828	570,523	850,732
Benalla	34	170	9	34,401	32,723	31,447	123,447	181,632
†Wangaratta	49	262	127	61,556	75,316	77,594	321,223	441,011
Bairnsdale	35	201	20	40,057	39,802	29,324	131,760	192,304
Morwell	21	736	13	179,788	1,003,029	1,261,748	173,745	420,829
Total	7,783	119,883	62,044	31,471,445	36,811,130	29,188,227	69,757,297	130,877,570
Others	1,382	8,574	882	1,721,459	2,137,138	7,025,399	8,475,735	11,814,622
Total State ..	9,165	128,457	62,926	33,192,904	38,948,268	36,213,626	78,233,032	142,692,192

* Includes Corio, Geelong West, and Newtown and Chilwell.
† Includes Shire of same name.

Value of Victorian production.

The value of production as estimated hereunder is based to a large extent on returns received annually from individual producers throughout the State. As a measure of total production it is incomplete as it does not include the building and construction industry, it omits small manufacturers with factories employing less than four hands, unless power-driven machinery is used, and excludes agriculturists with holdings of less than 1 acre.

Gross value is defined as the value placed on recorded production at the wholesale price realized in the principal markets. In cases where primary products are absorbed locally, or where they become raw material for secondary industry, these points are presumed to be the principal markets. Care is thus taken to prevent as far as possible all overlapping or double counting. The primary value of dairy production, in accordance with the above definition, is the price paid at the factory for milk or cream sold by the farmer; the value added by the process of manufacture into butter, &c., is included in manufacturing production.

GROSS VALUE OF VICTORIAN PRODUCTION.

Division of Industry.	1932–33.	1933–34.	1934–35.	1935–36.	1936–37.
	£	£	£	£	£
Agriculture	18,448,048	17,664,072	15,793,092	19,079,008	24,038,124
Pastoral	9,804,916	17,735,382	14,969,013	19,484,164	21,948,704
Dairying	9,621,493	7,905,988	9,368,531	11,376,604	13,018,154
Poultry and Bees ..	3,610,062	3,532,776	3,613,119	3,697,004	4,128,136
Wild Animals ..	423,229	499,245	581,647	890,078	953,046
Forestry	786,421	836,616	901,099	908,579	1,121,312
Fisheries	176,943	160,952	169,182	197,009	214,212
Mining	1,340,212	1,549,928	1,580,867	2,106,334	2,448,262
Manufacturing* ..	41,081,102	44,201,645	48,762,591	54,043,690	58,712,281
Total	85,292,426	94,086,604	95,739,141	111,782,470	126,582,231

* Manufacturing is included at its net or added value because the gross or wholesale selling value contains so much duplication of products, the finished article of one class of manufacture forming in numerous cases the raw material for others.

The ultimate aim of the valuation of production is to arrive at the sum available for distribution among those concerned in each class of industry, i.e.—

(*a*) Workers in all grades of the industry.

(*b*) Proprietors (including landlords) of any of the instruments of production concerned.

(*c*) Providers of capital, including debenture holders and mortgagees.

It is, therefore, necessary to deduct from the gross values of realization all costs of marketing and production, the former including freight, cartage, brokerage, commission, insurance, and containers, and the latter such items as stock feed, seed costs, manures, spraying, animal dips, power and water used, and depreciation. Complete details of these costs are not yet available for the forestry and fishing industries in Victoria, but the following table gives the value of production in detail after deduction of marketing costs, and may be considered to represent with a fair degree of accuracy the value of Victorian production at the place of production.

VALUE OF VICTORIAN PRODUCTION AT THE PLACE OF PRODUCTION.

Produce.	Value in—				
	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.
Agricultural.	£	£	£	£	£
Barley	186,814	184,297	184,545	259,568	393,249
Maize	92,157	91,405	131,945	137,684	189,679
Oats	431,991	578,994	468,622	544,655	672,456
Wheat	5,411,525*	5,241,554*	4,119,773*	6,560,446*	10,161,533
Onions	88,177	113,176	191,540	167,063	223,446
Potatoes	541,519	538,677	670,872	578,870	489,632
Fruit	1,226,269	832,810	1,007,729	1,188,958	1,285,249
Other Crops	6,972,815	6,544,079	6,246,726	6,425,843	7,405,560
Total	14,951,267	14,124,992	13,021,752	15,863,087	20,820,804
Pastoral.					
Wool	4,880,066	8,735,183	5,519,469	8,991,206	10,618,871
Sheep Slaughtered	1,210,382	3,915,441	4,700,644	4,613,721	5,451,803
Cattle Slaughtered	2,516,130	3,658,574	3,402,232	4,392,228	4,235,861
Horses	7,379	19,270	66,764	47,180	..
Total	8,613,957	16,328,468	13,689,109	18,044,335	20,306,535
Dairying.					
Cream for Butter	5,988,609	4,192,361	5,317,537	6,433,169	6,882,750
Milk for Cheese	180,806	146,208	201,991	253,857	319,157
Milk for Condensing and Concentrating	352,495	318,374	387,682	471,853	682,889
Whole Milk consumed	1,391,575	1,526,572	1,860,126	1,975,344	2,130,446
Pigs	1,312,045	1,353,565	1,154,966	1,781,393	2,481,841
Total	9,225,530	7,537,080	8,922,302	10,915,616	12,497,083
Poultry and Bees.					
Eggs	2,539,287	2,399,122	2,626,542	2,612,853	3,037,782
Poultry	736,395	848,501	668,857	717,767	728,532
Honey and Beeswax	53,936	17,345	39,540	77,505	45,360
Total	3,329,618	3,264,968	3,334,939	3,408,125	3,811,674
Wild Animals.					
Rabbits and Hares	213,479	149,064	230,202	164,397	140,710
Rabbit and Hare Skins, Etc.	129,657	267,926	250,621	643,538	741,751
Total	343,136	416,990	480,823	807,935	882,461
Forestry.					
Forest Sawmills	64,063	88,017	99,190	101,707	343,625
Firewood	393,620	419,384	486,980	529,040	489,996
Bark for tanning	79,641	81,436	78,630	61,459	69,486
Total	537,324	588,837	664,800	692,209	903,107
Fisheries.					
Fish	144,093	126,625	131,103	136,464	153,349
Crayfish	7,439	5,776	9,446	10,468	8,647
Oysters	39	51	..	14	3
Total	151,571	132,452	140,549	146,946	161,999

* Inclusive of wheat bounties.

VALUE OF VICTORIAN PRODUCTION AT THE PLACE OF PRODUCTION—*continued.*

Produce.	Value in—				
	1932–33.	1933–34.	1934–35.	1935–36.	1936–37.
Mining.	£	£	£	£	£
Gold	349,597	445,804	594,115	764,751	1,013,770
Coal—					
Black	274,903	328,704	215,413	282,253	253,835
Brown	276,799	271,360	264,192	249,476	323,914
Other Metals and Minerals ..	5,706	12,145	11,421	89,204	93,410
Quarrying	286,898	322,905	374,454	407,965	462,359
Total	1,193,903	1,380,918	1,459,595	1,793,649	2,147,288
Total Primary ..	38,346,306	43,774,705	41,713,869	51,671,902	61,530,951
Manufacturing ..	41,081,102	44,201,645	48,762,591	54,043,690	58,712,281
Grand Total ..	79,427,408	87,976,350	90,476,460	105,715,592	120,243,232

Costs of Production. The values of production of the various classes of industry, as they appear in the previous table for the year 1936–37, are shown hereunder, together with the costs of production where available. The difference between the two figures represents the net value of production or the net return available to the producers for wages, rent, interest and profits. As previously explained, the deductions are incomplete, but the margin of error is considered to be small in view of the comparative unimportance of the industries concerned from the point of view of production costs.

COSTS OF PRODUCTION, 1936-37.

Industry.	Value at Place of Production.	Cost of Production.†	Net Value.	Net Value per Head of Population.
	£	£	£	£ s. d.
Agriculture	20,820,804	4,464,463	16,356,341	8 16 7
Pastoral	20,306,535	804,325	19,502,210	10 10 7
Dairying	12,497,083	1,718,897	10,778,186	5 16 5
Poultry and Bees ..	3,811,674	1,464,750	2,346,924	1 5 4
Miscellaneous	1,947,567	*	1,947,567	1 1 0
Mining	2,147,288	553,754	1,593,534	0 17 2
Manufacturing	58,712,281	..	58,712,281	31 13 11
Total	120,243,232	..	111,237,043	60 1 0

* Not available.

† Costs of production include stockfeed, seed costs and pickling, manures, spraying, sheep and cattle dips, and power and water used in irrigation, &c.

Depreciation. While depreciation of assets used must be considered as a legitimate charge against the value of production, the problem of exact measurement presents much difficulty. Depreciation may generally be considered as proportionate to the life of the asset, but this cannot always be accurately measured, particularly with machinery where obsolescence might be suddenly accentuated by new invention. Care and expertness in handling and proper repairing must influence the effective life of machinery, while managerial policy and methods of determining depreciation affect annual amounts actually written off.

In these circumstances there is no certainty that depreciation will vary in direct proportion to annual production as in the case of other production costs, but it is considered that some attempt at measurement of the annual amount chargeable against production should be made.

The table hereunder shows details of the fixed capital invested in certain of Victorian industries and the estimated depreciation thereon for the year 1936–37 :—

DEPRECIATION, 1936–37.

Industry.	Fixed Capital.	Depreciation.	Per Cent.
	£	£	
Agricultural machinery	8,240,000	824,000	10
Pastoral machinery	860,000	43,000	5
Dairying machinery	440,000	22,000	5
Capital value building and fences in agricultural, dairying, and pastoral industry ..	41,000,000	1,640,000	4
Capital value of factory land, buildings, plant, and machinery	75,162,000	2,630,000	3·5

The estimated percentages of depreciation on agricultural, pastoral, and dairying machinery and on the value of buildings and fences in those industries have been arbitrarily fixed by Australian Statisticians in the interests of uniformity. The amount of depreciation on factory buildings, &c., is the total written off as shown by the returns rendered by manufacturers.

Monthly employment in factories. An analysis has been made of the number of employees in factories in Victoria on the pay day nearest the 15th day of each month for the past seven years.

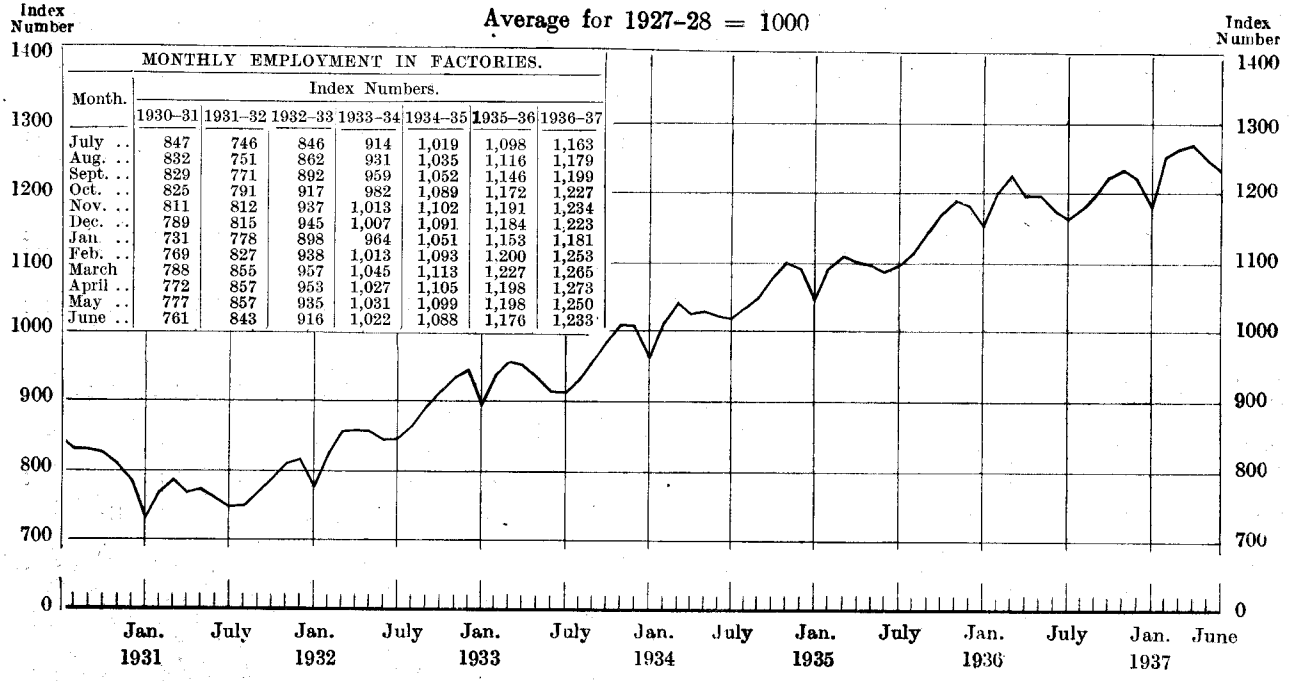
The monthly totals have been converted into index numbers which are given hereunder with an accompanying graph. This shows clearly the progress made in factory employment from the low level of January, 1931. The total number employed in April, 1937, was the highest recorded.

MONTHLY INDEX OF EMPLOYMENT IN VICTORIAN FACTORIES FROM 1ST JULY, 1930, TO 30TH JUNE, 1937.

Average for 1927–28 = 1000

MONTHLY EMPLOYMENT IN FACTORIES.

Month.	Index Numbers.						
	1930–31	1931–32	1932–33	1933–34	1934–35	1935–36	1936–37
July ..	847	746	846	914	1,019	1,098	1,163
Aug. ..	832	751	862	931	1,035	1,116	1,179
Sept. ..	829	771	892	959	1,052	1,146	1,199
Oct. ..	825	791	917	982	1,089	1,172	1,227
Nov. ..	811	812	937	1,013	1,102	1,191	1,234
Dec. ..	789	815	945	1,007	1,091	1,184	1,223
Jan. ..	731	778	898	964	1,051	1,153	1,181
Feb. ..	769	827	938	1,013	1,093	1,200	1,253
March	788	855	957	1,045	1,113	1,227	1,265
April ..	772	857	953	1,027	1,105	1,198	1,273
May ..	777	857	935	1,031	1,099	1,198	1,250
June ..	761	843	916	1,022	1,088	1,176	1,233



Monthly employment in factories.

Statistics furnished by manufacturers include information relating to the number of employees on factory pay-rolls on the pay day nearest the 15th day of each month, including managers, clerks, engine-drivers, operatives, carters, and

MONTHLY EMPLOYMENT

Industry.	Average Number			
	July.	August.	September.	October.
Aerated waters	416	440	456	505
Agricultural implements	3,003	3,162	3,411	3,469
Art metal	591	584	590	590
Bacon curing	525	517	520	528
Bags and sacks	183	179	177	176
Bags, trunks, &c.	857	881	916	945
Bakeries	2,726	2,754	2,748	2,742
Basketware	71	123	135	144
Bedding and mattress	632	625	620	613
Biscuits	1,036	1,056	1,117	1,150
Boiling down, tallow, &c.	351	352	366	443
Boot accessories	660	672	695	712
Boot repairing	197	197	195	195
Boots and shoes	8,350	8,929	9,489	9,793
Boxes and cases	769	792	839	855
Brass and copper	1,648	1,607	1,641	1,687
Breweries	1,272	1,274	1,271	1,289
Bricks, tiles, firebricks	1,832	1,872	1,921	1,890
Brooms and brushware	333	340	338	337
Butter and cheese	2,367	2,512	2,764	3,053
Cabinet, furniture	2,874	2,883	2,872	2,899
Cement and cement goods	912	968	929	925
Cereal foods	920	903	887	908
Chaffcutting	379	389	368	331
Chemical fertilizers	773	791	789	858
Chemicals, drugs	1,576	1,605	1,625	1,654
Condiments, coffee	868	795	917	940
Confectionery	2,833	2,858	2,804	2,750
Cooperage	241	241	241	245
Cotton	1,608	1,619	1,623	1,594
Cutlery and small tools	183	188	191	183
Cycle and motor accessories	479	483	482	486
Die sinking and engraving	95	94	95	98
Distilleries	85	80	68	71
Dressmaking	7,270	7,764	8,054	8,111
Dried fruit	549	476	481	485
Dyeworks and cleaning	748	754	764	818
Earthenware, china, &c.	987	985	1,013	1,027
Electric light—Government	965	958	983	985
,, Local authority	257	255	253	260
,, Companies	72	73	72	70
Electrical installations	2,913	2,999	2,892	2,903
Electrotyping and stereotyping	80	80	79	80
Engineering (not marine or electrical)	7,549	7,672	7,668	7,779
Explosives	1,718	1,734	1,754	1,729

messengers and all others engaged in work connected with manufacturing.

This information has been tabulated, and the monthly totals for each industry are set out in the following table :—

IN FACTORIES, 1936-37.

of Employees in—

November.	December.	January.	February.	March.	April.	May.	June
531	601	568	547	588	496	430	420
3,373	3,310	3,379	3,546	3,558	3,646	3,598	3,617
587	595	576	600	638	658	661	680
547	548	543	542	537	540	538	517
176	184	178	188	176	190	197	189
964	940	809	903	905	898	907	900
2,716	2,759	2,647	2,761	2,778	2,791	2,790	2,812
151	154	149	146	151	140	131	85
608	618	649	684	690	699	708	698
1,177	1,078	1,048	1,136	1,116	1,128	1,079	1,064
457	443	393	402	362	395	374	362
709	669	632	699	736	740	755	729
196	195	181	196	197	197	198	197
9,885	8,862	7,751	9,010	9,379	9,570	9,602	9,157
888	897	865	907	927	937	914	869
1,629	1,620	1,603	1,720	1,740	1,750	1,764	1,823
1,325	1,377	1,359	1,338	1,350	1,345	1,344	1,333
1,905	1,854	1,803	1,843	1,951	1,943	1,903	1,880
331	335	331	343	350	342	349	346
3,212	3,220	3,088	2,953	2,815	2,675	2,589	2,582
2,952	2,996	2,845	2,991	3,046	3,117	3,153	3,126
954	946	986	990	987	1,016	1,035	1,056
914	907	819	925	943	978	987	908
331	323	358	398	385	417	390	358
838	811	830	960	1,263	1,302	1,140	1,061
1,657	1,674	1,550	1,592	1,605	1,652	1,666	1,708
964	906	800	777	803	828	868	815
2,799	2,829	2,369	2,669	2,653	2,854	2,891	2,851
252	253	243	254	249	247	249	248
1,568	1,568	1,570	1,607	1,587	1,589	1,641	1,666
186	184	185	197	202	210	216	215
502	511	505	534	556	571	598	633
102	103	101	108	113	110	107	108
83	74	62	65	69	102	109	73
7,713	7,336	6,586	7,761	7,782	7,752	7,575	6,946
438	435	480	548	1,108	1,628	1,247	958
859	881	874	885	892	907	896	896
1,036	1,009	1,013	1,032	1,031	1,033	1,045	1,061
992	991	1,001	1,005	1,005	1,009	1,021	1,009
261	260	258	275	276	276	280	279
71	72	70	67	69	70	70	69
2,957	3,059	2,974	2,964	2,959	3,025	3,061	3,076
80	78	76	76	76	79	79	79
7,782	7,819	7,787	7,902	7,993	8,144	8,254	8,413
1,712	1,705	1,694	1,728	1,738	1,767	1,806	1,827

MONTHLY EMPLOYMENT IN

Industry.	Average Number			
	July.	August.	September.	October.
Extracting and refining—other metals ..	39	41	42	45
Fellmongery	296	292	301	567
Furnishing, drapery	443	440	445	440
Furriers	631	628	636	661
Galvanized iron working	2,492	2,539	2,529	2,633
Gas fittings and meters	450	447	450	450
Gasworks—Local authority	66	66	66	66
,, Companies	628	619	629	658
Glass (including bottles)	1,159	1,151	1,237	1,265
Gold, silver, and electroplating	1,015	1,018	1,040	1,013
Grain milling	1,083	1,088	983	1,037
Handkerchiefs, ties, &c.	527	576	612	610
Hats and caps	1,418	1,478	1,455	1,426
Horse-drawn vehicles	444	446	439	444
Hosiery and knitting	10,562	10,725	10,998	11,171
Ice, refrigerating	1,411	1,429	1,575	2,946
Ice cream	117	131	178	219
Inks, polishes, &c.	388	389	417	416
Jams and fruit preserving	1,530	1,639	1,605	1,701
Jewellery	742	775	805	809
Joinery	1,467	1,525	1,482	1,487
Lime, plaster, and asphalt	857	860	879	934
Machine belting	64	62	61	63
Malting	304	308	301	283
Margarine	69	68	67	68
Marble, slate, &c.	320	322	330	316
Meat and fish preserving	158	140	125	198
Millinery	1,417	1,490	1,506	1,514
Modelling	23	23	23	23
Motor body building	3,552	3,147	3,304	3,192
Motor construction and assembly ..	2,196	2,103	2,074	2,087
Motor repairs	3,701	3,694	3,744	3,790
Musical instruments	88	88	86	87
Newspapers	2,226	2,289	2,307	2,318
Oils, mineral	151	156	155	157
Oils, vegetable	109	119	118	96
Paper, paper bags, and boxes	2,301	2,354	2,410	2,457
Perambulators	75	83	83	90
Photo engraving	322	327	328	333
Pickles and sauces	274	269	266	255
Picture frames	66	66	66	63
Printing and bookbinding	5,863	5,933	5,979	6,076
Rope and cordage	978	1,017	1,052	997
Rubber tyres, &c.	2,019	2,083	2,184	2,173
Rubber goods (other)	469	479	468	503
Saddlery, harness	85	82	77	75
Sausage skins	215	222	225	344
Sawmills—forest	1,666	1,652	1,672	1,711
,, Town	1,601	1,618	1,646	1,659
Ship and boat building	254	375	267	384

*FACTORIES, 1936-37—*continued.*

of Employees in—

November.	December.	January.	February.	March.	April.	May.	June.
42	42	34	42	45	45	47	46
582	581	379	365	372	366	336	279
453	455	445	435	430	447	458	460
711	709	710	777	785	765	746	666
2,738	2,805	2,665	2,757	2,726	2,712	2,636	2,566
451	449	444	449	447	449	445	444
66	66	67	68	67	65	66	68
668	665	658	641	650	657	659	673
1,260	1,258	1,240	1,242	1,221	1,235	1,229	1,272
1,001	970	979	1,027	1,050	1,082	1,100	1,107
1,079	1,097	1,294	1,189	1,116	1,109	1,043	922
617	588	481	580	600	600	589	538
1,405	1,359	1,157	1,343	1,348	1,333	1,350	1,315
454	464	438	444	446	452	443	445
11,278	11,327	11,348	11,641	11,699	11,838	11,884	11,927
3,402	3,142	2,479	2,278	2,101	1,920	1,741	1,560
254	279	307	336	268	187	138	133
419	429	408	433	431	422	423	403
1,773	1,858	2,365	4,919	5,158	4,399	1,857	1,741
805	788	655	760	780	788	797	822
1,505	1,494	1,406	1,433	1,453	1,437	1,421	1,432
897	876	859	887	884	900	906	930
63	64	64	67	66	70	70	72
274	266	249	229	217	317	311	314
68	67	65	65	67	73	73	72
313	316	314	325	329	343	347	349
230	229	219	234	248	246	240	219
1,431	1,157	1,095	1,380	1,379	1,338	1,265	1,142
23	23	23	23	23	23	23	23
3,043	3,107	3,212	3,781	3,814	3,915	3,935	3,834
2,078	2,176	2,127	2,174	2,181	2,191	2,355	2,373
3,818	3,895	3,851	3,938	3,956	3,948	4,003	3,973
87	86	84	85	79	81	83	82
2,298	2,398	2,297	2,317	2,318	2,378	2,375	2,360
153	161	158	159	152	154	163	173
102	97	82	111	139	144	138	118
2,458	2,459	2,379	2,440	2,444	2,461	2,512	2,502
94	102	89	95	94	93	96	94
340	341	329	339	341	350	353	355
260	240	253	346	373	360	270	259
60	66	59	59	66	67	68	66
6,160	6,167	6,003	6,117	6,072	6,126	6,086	6,111
973	993	968	1,026	1,017	1,043	1,057	1,084
2,144	2,120	2,081	2,135	2,177	2,289	2,333	2,327
515	527	509	512	529	538	543	525
75	77	78	82	85	86	91	93
383	369	310	305	288	287	270	234
1,764	1,749	1,724	1,824	1,822	1,766	1,736	1,669
1,677	1,679	1,648	1,697	1,697	1,681	1,678	1,683
297	306	316	380	282	322	313	341

MONTHLY EMPLOYMENT IN

Industry.	Average Numbe			
	July.	August.	Septem-ber.	October.
Shirts, collars, &c.	4,782	4,859	4,958	5,002
Silk, natural and artificial	467	468	476	515
Smelting, iron rolling	5,203	5,234	5,340	5,307
Soap and candle	673	665	667	682
Stationery	1,142	1,101	1,079	1,063
Stoves and ovens	729	711	705	707
Surgical instruments	284	286	283	285
Tailoring	7,410	7,556	7,716	7,863
Tanning and leather dressing	2,296	2,252	2,364	2,382
Tents and sailmaking	195	195	194	206
Tobacco and cigarettes	1,960	2,000	2,031	2,038
Toys, games, &c.	618	621	652	689
Tram and railway workshops	5,711	5,666	5,660	5,661
Umbrellas	48	49	48	49
Watches and clocks	85	86	85	85
Waterproof clothing	174	216	219	215
White lead, paint, &c.	315	311	312	297
Window blinds, &c.	41	42	38	40
Wireless apparatus	1,180	1,129	1,043	1,023
Wireworking	866	876	884	903
Wood turning	478	477	487	498
Woollen mills	10,135	9,915	10,033	10,114
Other factories	6,146	6,263	6,360	6,314
All Industries .. .. Total	174,022	176,364	179,474	183,553

BUILDING STATISTICS, 1936-37.

In view of the great importance of statistics of building and construction, their collection was undertaken in Victoria in 1929.

The particulars given below for the year 1936-37 were obtained from returns furnished by 982 builders.

The absence of any system of registration of builders makes it difficult to ensure that a return is obtained from every builder in the State. It is suspected that a number of builders do not render returns. The statistics presented hereunder cannot, therefore, be considered as an absolute measure of the value of the work done but merely as an indication of the trend of building operations. The figures provide valuable information relating to the division of the expenditure amongst the various trades engaged in and those dependent upon the industry, and also supply important data not otherwise available relating to the contribution of the building trade to the national income.

The value of building work done in each of the past five years, according to the returns received, was as follows :—

FACTORIES, 1936-37—*continued.*

of Employees in—

November.	December	January.	February.	March.	April.	May.	June.
4,986	4,892	4,457	4,746	4,748	4,663	4,710	4,787
480	449	443	446	441	459	471	484
5,353	5,357	5,350	5,546	5,585	5,665	5,698	5,810
689	676	671	693	706	711	718	710
1,075	1,105	1,081	1,104	1,076	1,080	1,040	1,051
713	719	709	721	718	753	774	793
285	286	275	277	267	263	264	264
7,876	7,838	7,344	7,799	7,818	7,772	7,817	7,704
2,406	2,359	2,333	2,495	2,505	2,483	2,447	2,424
213	228	213	217	210	200	206	202
2,062	2,104	2,005	1,953	1,979	1,990	1,975	1,991
704	677	577	599	605	610	636	627
5,650	5,686	5,735	5,920	5,793	5,892	5,945	5,988
49	51	51	52	70	69	68	68
90	88	88	89	88	89	91	93
221	220	233	243	243	248	267	276
300	302	300	310	316	323	316	322
40	41	42	43	40	40	42	42
1,047	1,081	1,099	1,251	1,273	1,344	1,411	1,459
911	923	906	964	969	984	970	986
515	515	510	501	526	511	530	515
10,200	10,094	10,109	10,090	10,003	9,912	9,747	9,577
6,408	6,332	6,140	6,418	6,576	6,826	6,631	6,463
184,684	182,950	176,663	187,542	189,221	190,548	187,090	184,531

VALUE OF BUILDING WORK.

—	1932–33.	1933–34.	1934–35.	1935–36.	1936–37.
Number of returns..	730	717	877	965	982
	£	£	£	£	£
New buildings ..	1,674,852	2,172,128	3,714,072	4,759,178	5,378,287
Repairs and additions	652,961	798,146	1,105,798	1,369,274	1,417,867
Other construction..	83,977	122,053	170,514	138,679	226,111
Total ..	2,411,790	3,092,327	4,990,384	6,267,131	7,022,265

The number of persons employed and the total salaries and wages paid are shown hereunder for the year 1936–37.

Persons Employed.	Number.	Salaries and Wages Paid.	Average Salary or Wage.
		£	£ s. d.
Working proprietors	1,082	266,026	245 17 4
Managers	116	39,826	343 6 7
Clerks—			
Male	74	13,085	176 16 6
Female	54	5,204	96 7 5
Others	5,780	1,189,638	205 16 5

PAYMENTS TO SUB-CONTRACTORS, 1936–37.

	£		£
Plumbers	327,278	Bricklayers	175,685
Plasterers, including fibrous	320,072	Tilers	99,213
Carpenters and Joiners ..	198,110	Others	356,834
Painters	158,108		
Electricians	129,813	Total	1,765,113

The term "Others" in this statement includes sub-contractors for excavations, concreting, asphalting, &c. The term "sub-contractor" is intended to mean sub-contractor for "labour and material" only. Persons compiling returns were instructed to include sub-contractors for "labour only" under the heading of "persons employed," and the amount of the contract under "wages paid."

Materials used. The value of materials used has been, in most cases, carefully dissected, but some builders have been unable to give the details asked for. This is regrettable, as it is important that complete statistics in regard to materials used should be available. Where the details could not be supplied it was necessary to include the total cost of all materials used under the heading of "Other materials." The value of the materials used is shown below.

Materials.	Value.				
	1932–33.	1933–34.	1934–35.	1935–36.	1936–37.
	£	£	£	£	£
Timber	371,936	496,441	771,914	948,150	1,225,656†
Bricks	178,820	225,616	359,921	463,113	472,547
Iron and Steel ..	*	*	*	301,538	384,747
Tiles	40,309	53,889	82,975	104,725	106,675
Cement and Lime ..	98,196	135,202	209,812	257,597	324,496‡
Other materials ..	567,883	634,982	1,042,863	943,201	913,332
Total ..	1,257,144	1,546,130	2,467,485	3,018,324	3,427,453

* Included in "Other materials." † Includes joinery. ‡ Includes sand.

In addition to payment for wages, materials, and sub-contracts, there are numerous other expenses incidental to building, such as fuel, insurance, building fees of various kinds, &c., and these have been included under the heading of "Other expenses," and totalled £30,654 in 1932–33, £32,122 in 1933–34, £46,586 in 1934–35, £59,496 in 1935–36, and £73,629 in 1936–37.

Capital invested in plant and machinery amounted to £69,974 in 1932–33, £72,635 in 1933–34, £92,890 in 1934–35, £83,695 in

1935–36, and to £103,390 in 1936–37: capital invested in land and buildings used as workshops amounted to £78,215 in 1932–33, £79,920 in 1933–34, £83,397 in 1934–35, £68,514 in 1935–36, and to £78,349 in 1936–37.

The following table is an analysis of the buildings completed during the years 1933–34 to 1936–37. As some of these buildings were doubtless commenced in the previous year, the total value is not a measure of the value of building construction for each respective year. The table published at the beginning of this review purporting to show value of work done was designed for this purpose.

BUILDINGS COMPLETED DURING 1933–34 TO 1936–37.

	1933–34.		1934–35.		1935–36.		1936–37.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
		£		£		£		£
Business premises ..	241	666,605	295	1,327,426	421	1,445,080	484	1,514,018
Other buildings ..	..	529,220	..	658,510	..	896,384	..	1,141,676
Dwellings—								
Brick ..	514	677,102	1,009	1,202,968	1,433	1,580,634	1,388	1,729,927
Wood	406	216,661	715	383,267	1,049	604,405	1,316	818,424
Total Value ..	..	2,089,588	..	3,572,171	..	4,526,503	..	5,204,045

Information collected with regard to dwellings was confined to those constructed of brick and of wood as representative of the most common types of houses built in Victoria.

The table hereunder summarizes the result.

DWELLINGS CONSTRUCTED, 1936–37.

Number of Rooms.	Brick Dwellings.			Wooden Dwellings.		
	Number.	Value.	Average Value per Dwelling.	Number.	Value.	Average Value per Dwelling.
		£	£		£	£
Three rooms ..	18	8,419	468	51	12,781	251
Four rooms ..	115	79,396	690	308	149,533	485
Five rooms ..	610	556,683	913	792	507,337	641
Six rooms ..	368	427,910	1,163	124	87,825	708
Seven rooms ..	74	117,374	1,586	20	23,163	1,158
Eight rooms ..	71	135,982	1,915	9	9,645	1,072
Nine rooms ..	17	32,608	1,918	2	2,003	1,002
Ten rooms ..	46	84,998	1,848	4	12,154	3,039
Over ten rooms ..	69	286,557	4,153	6	13,983	2,330
Total ..	1,388	1,729,927	1,246	1,316	818,424	622