



**LIVESTOCK PRODUCTS**

AUSTRALIA

EMBARGO: 11.30AM (CANBERRA TIME) WED 17 NOV 2010

**KEY FIGURES**

TREND ESTIMATES	Sep Qtr 2009 '000	Jun Qtr 2010 '000	Sep Qtr 2010 '000
<b>Number Slaughtered<sup>(a)</sup></b>			
Cattle (excl. calves)	1 868	1 867	1 908
Calves	223	221	196
Sheep	2 289	1 546	1 479
Lambs	5 087	4 684	4 735
Pigs	1 130	1 154	1 170
Chickens	nya	nya	nya

nya not yet available

(a) A new methodology and revised definitions have been adopted for producing estimates of livestock slaughtering and meat production. For further details refer to the Explanatory Notes.

TREND ESTIMATES	Sep Qtr 2009 tonnes	Jun Qtr 2010 tonnes	Sep Qtr 2010 tonnes
<b>Meat</b>			
<b>Produced</b> (a)			
Beef	510 035	517 192	530 113
Veal	10 773	13 064	11 125
Mutton	48 985	35 000	34 168
Lamb	105 562	100 839	101 797
Pig meat	81 424	84 575	86 434
Chicken meat	nya	nya	nya
<b>Wool Receivals</b>	87 799	85 518	83 073

nya not yet available

(a) A new methodology and revised definitions have been adopted for producing estimates of livestock slaughtering and meat production. For further details refer to the Explanatory Notes.

**INQUIRIES**

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070.

	Jun Qtr 2009 ML	Mar Qtr 2010 ML	Jun Qtr 2010 ML
Whole milk intake by factories	2 305	2 269	2 340

**KEY POINTS**

- The trend estimate for sheep slaughterings in the September quarter 2010 decreased 4% to 1.5 million.
- In the September quarter 2010, calf slaughterings fell 11%.
- The trend estimate for live sheep exports in the September quarter 2010 rose 67%.
- Exports of live cattle in the September quarter 2010 increased 18% to 217 thousand.

# NOTES

## FORTHCOMING ISSUES

ISSUE (Quarter)

RELEASE DATE

December 2010

21 February 2011



## INTRODUCTION

This publication presents statistics on livestock slaughterings, meat production, whole milk intake by factories, market milk sales by factories, receipts of taxable wool by brokers and dealers, exports of live sheep and cattle and exports of fresh, chilled, frozen and processed meat. It also includes seasonally adjusted and trend estimates of slaughtering, meat production, whole milk intake and wool receipts. More detailed information can be obtained by contacting the Australian Bureau of Statistics or by referring to the monthly publication *Livestock and Meat, Australia* (cat. no. 7218.0.55.001).

## CHANGES IN THIS ISSUE

Final estimates of slaughter and production for poultry for the September quarter 2010 are not yet available. These data, including updated seasonally adjusted and trend estimates, will be published in the next issue.

As a result of a quality review of the Livestock collection, a new methodology and revised definitions have been adopted for producing estimates of livestock slaughtering and meat production. For further details refer to the Explanatory Notes.

Wool estimates in this issue are based on a revised sampling frame, following a separate coverage exercise. Coverage exercises are undertaken on a regular basis to ensure the quality of estimates. Similar coverage exercises will be undertaken for the Livestock collection and Poultry and Game Birds collection prior to the release of estimates for the December quarter 2010. In the case of wool, updates to the sampling frame have had a negligible impact on associated time series.

## CHANGES TO FORTHCOMING ISSUES

Coverage exercises are underway to review the quality of the sampling frames for the Livestock collection and Poultry and Game Birds collection. This will also enable revision of the constant factor applied to account for production from small abattoirs. Updates to the sampling frames and constant will be applied prior to the release of the December quarter 2010 issue of *Livestock Products, Australia* (cat. no. 7215.0).

Further information, including details of associated impacts on time series, will be provided in the December quarter 2010 issue of *Livestock Products, Australia* (cat. no. 7215.0).



## ABBREVIATIONS

'000 thousand

\$'000 thousand dollars

ABS Australian Bureau of Statistics

ML megalitre

t tonne

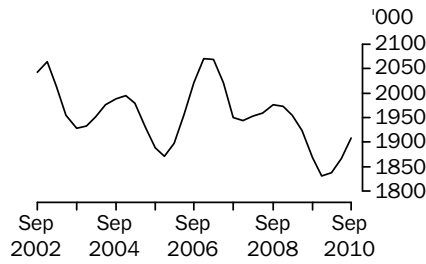
UHT ultra heat treated

Brian Pink

Australian Statistician

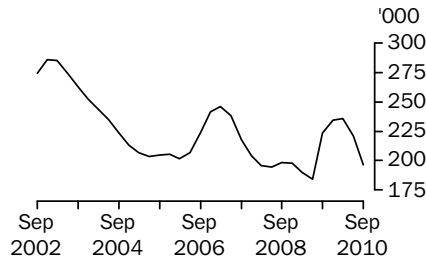
## LIVESTOCK SLAUGHTERED TREND

### CATTLE (EXCLUDING CALVES)



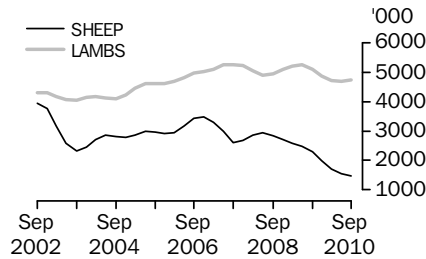
In the September quarter 2010, the number of cattle slaughtered (excluding calves) increased 2% to 1.9 million compared to the previous quarter.

### CALVES



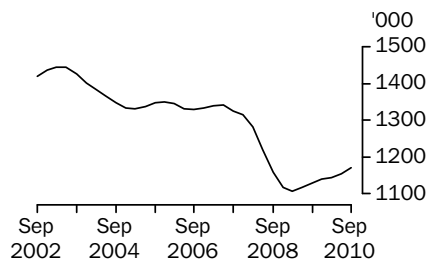
The number of calves slaughtered in the September quarter 2010 fell 11% to 196 thousand compared to the previous quarter.

### SHEEP AND LAMBS



The number of sheep slaughtered in the September quarter 2010 decreased 4% to 1.5 million compared to the previous quarter. Lamb slaughterings increased 1% to 4.7 million.

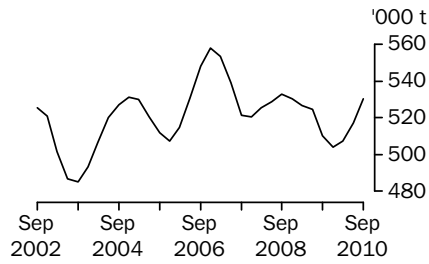
### PIGS



Pig slaughterings in the September quarter 2010 increased marginally to 1.2 million.

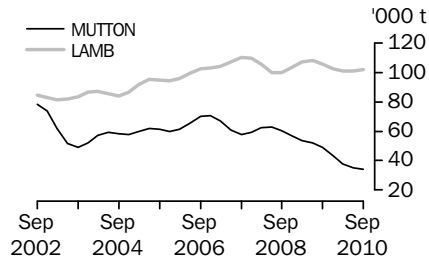
## MEAT PRODUCTION TREND

### BEEF



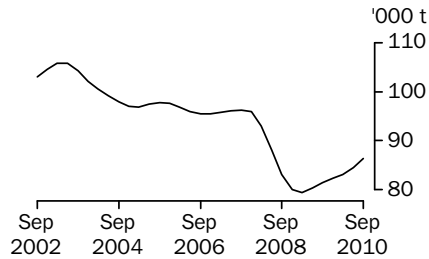
Beef production in the September quarter 2010 increased 2% to 530 thousand tonnes compared to the previous quarter.

### MUTTON AND LAMB



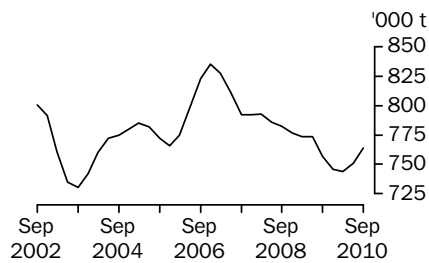
Mutton production in the September quarter 2010 decreased 2% to 34 thousand tonnes compared to the previous quarter. Lamb production increased 1% to 102 thousand tonnes.

### PIG MEAT



In the September quarter 2010, pig meat production increased 2% compared to the previous quarter, to 86 thousand tonnes.

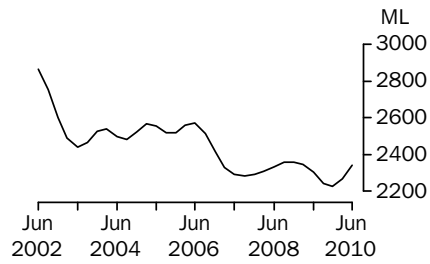
### TOTAL RED MEAT



Total red meat production increased 2% compared to the previous quarter, to 764 thousand tonnes.

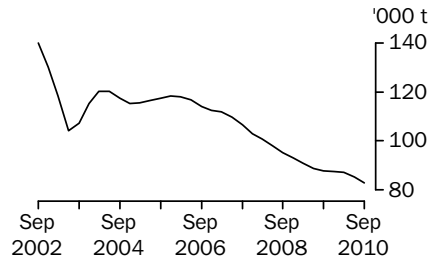
## LIVESTOCK PRODUCTS TREND

### WHOLE MILK INTAKE BY FACTORIES



Whole milk intake by factories in the June quarter 2010 increased by 3% to 2,340 megalitres compared to the March quarter 2010.

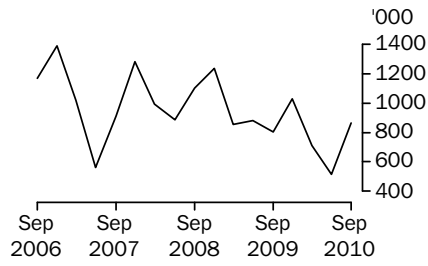
### BROKERS AND DEALERS RECEIVALS OF TAXABLE WOOL



In the September quarter 2010, wool receivals by brokers and dealers decreased by 3% to 83 thousand tonnes compared to the June quarter.

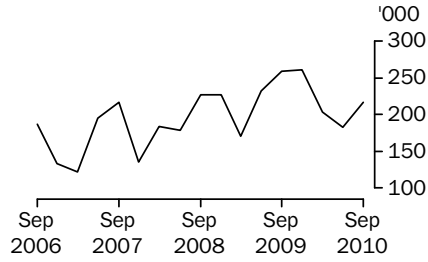
# LIVESTOCK EXPORTS ORIGINAL

## EXPORTS OF LIVE SHEEP



Live sheep exports in the September quarter 2010 increased 67% to 863 thousand compared to the previous quarter.

## EXPORTS OF LIVE CATTLE



Exports of live cattle in the September quarter 2010 increased 18% to 217 thousand compared to the previous quarter.

## LIST OF TABLES AND GRAPHS

---

page

### OVERVIEW

- 1** Livestock slaughtered, Australia . . . . . 8
- 2** Livestock products, Australia . . . . . 9

### EXPORTS OF MEAT AND LIVE ANIMALS

- 3** Exports of fresh, chilled, frozen and processed meat, Australia . . . . . 10
- 4** Exports of live sheep and cattle, Australia . . . . . 11

### LIVESTOCK PRODUCTS

- 5** Whole milk intake by factories, by state . . . . . 12
- 6** Market milk sales by factories, by state . . . . . 13
- 7** Brokers and dealers receivals of taxable wool, by state . . . . . 14

## LIVESTOCK SLAUGHTERED(a)(b)(c), Australia: All series

Quarter	Bulls, bullocks and steers	Cows and heifers	Cattle (excluding calves)	Calves	Sheep	Lambs	Pigs
	'000	'000	'000	'000	'000	'000	'000
ORIGINAL							
<b>2009</b>							
June	930.8	1 033.5	1 964.2	190.2	2 233.2	5 057.4	1 146.8
September	1 056.4	911.4	1 967.8	377.0	1 833.2	5 025.0	1 146.2
December	981.1	790.6	1 771.7	159.4	2 382.1	5 193.9	1 151.0
<b>2010</b>							
March	908.1	824.1	1 732.2	139.0	1 895.7	4 525.9	1 090.4
June	977.3	1 011.6	1 988.9	227.8	1 222.0	4 733.2	1 173.4
September	1 025.7	886.4	1 912.1	308.3	1 351.9	4 411.2	1 201.3
SEASONALLY ADJUSTED							
<b>2009</b>							
June	938.1	939.9	1 878.1	187.1	2 511.7	5 130.1	1 115.6
September	1 020.8	918.5	1 939.3	216.6	2 262.2	5 301.2	1 133.7
December	955.8	834.9	1 790.6	226.7	2 040.6	4 864.3	1 146.6
<b>2010</b>							
March	946.5	843.3	1 789.8	254.4	1 671.1	4 385.5	1 139.9
June	998.9	936.8	1 935.7	224.0	1 380.0	4 965.5	1 142.6
September	989.3	889.7	1 879.0	178.5	1 664.0	4 656.3	1 184.8
TREND							
<b>2009</b>							
June	979.9	944.5	1 924.4	183.9	2 470.1	5 257.6	1 116.7
September	974.5	893.5	1 868.0	223.4	2 289.1	5 087.3	1 130.3
December	969.1	862.9	1 832.0	234.3	1 975.1	4 865.3	1 139.2
<b>2010</b>							
March	969.3	867.8	1 837.2	235.4	1 705.8	4 712.3	1 144.0
June	977.0	890.4	1 867.3	220.6	1 546.3	4 684.0	1 154.4
September	994.1	914.3	1 908.3	196.3	1 479.0	4 735.2	1 170.0

- (a) Chicken data are not yet available and will be included in the next issue.
- (b) For human consumption. Refer to the Explanatory Notes for further information.
- (c) A new methodology and revised definitions have been adopted for producing estimates of livestock slaughtering and meat production. For further details refer to the Explanatory Notes.



## LIVESTOCK PRODUCTS, AUSTRALIA: (a)(b): All Series

	RED MEAT(c)						Whole milk intake by factories(d)	Brokers and dealers receivals of taxable wool(e)
	Beef	Veal	Mutton	Lamb	Pig meat	Total red meat		
	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes		
ORIGINAL								
<b>2009</b>								
June	525 273	6 973	44 581	104 899	83 159	764 885	1 797	75 378
September	540 227	16 758	40 076	102 163	83 912	783 136	2 252	86 170
December	489 129	11 044	54 068	107 978	81 294	743 513	2 849	106 033
<b>2010</b>								
March	481 093	11 021	40 703	97 571	78 857	709 243	2 048	89 339
June	546 065	13 439	26 927	104 825	87 198	778 455	1 870	71 195
September	529 817	13 884	31 570	93 724	89 599	758 594	nya	83 176
SEASONALLY ADJUSTED								
<b>2009</b>								
June	507 195	7 002	52 394	104 490	80 025	751 108	2 316	90 093
September	534 299	11 405	49 277	109 704	82 174	786 860	2 250	84 056
December	492 005	13 364	44 237	101 745	82 681	734 032	2 184	93 733
<b>2010</b>								
March	493 476	15 235	36 912	97 178	82 461	725 262	2 231	88 489
June	536 057	13 775	31 778	104 571	84 000	770 180	2 414	84 913
September	523 230	9 439	37 953	100 617	87 614	758 852	nya	82 237
TREND								
<b>2009</b>								
June	524 492	8 413	52 069	108 137	80 308	773 418	2 305	88 791
September	510 035	10 773	48 985	105 562	81 424	756 778	2 242	87 799
December	504 097	13 571	43 105	102 723	82 337	745 833	2 227	87 474
<b>2010</b>								
March	507 425	14 275	37 883	101 050	83 127	743 761	2 269	87 245
June	517 192	13 064	35 000	100 839	84 575	750 669	2 340	85 518
September	530 113	11 125	34 168	101 797	86 434	763 637	nya	83 073

nya not yet available

- (a) Chicken data are not yet available and will be included in the next issue.
- (b) A new methodology and revised definitions have been adopted for producing estimates of livestock slaughtering and meat production. For further details refer to the Explanatory Notes.

- (c) Carcass weight excluding offal. Refer to the Explanatory Notes for further information.
- (d) Original data sourced from Dairy Australia. Includes whole milk equivalent of farm cream intake.
- (e) Taxable receivals only. Refer to the Explanatory Notes for further information.

## EXPORTS OF FRESH, CHILLED, FROZEN AND PROCESSED MEAT(a)(b), Australia: Original

Period	FRESH, CHILLED OR FROZEN MEAT									PROCESSED MEAT	
	Beef bone-in(c)	Beef bone-out(c)	Veal bone-in	Veal bone-out	Mutton bone-in	Mutton bone-out	Lamb bone-in	Lamb bone-out	Pork	Bacon and ham(d)	Canned meat(e)
	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes
<b>2007-08</b>	57 199	917 494	3 704	5 049	119 496	43 827	134 101	32 499	39 138	772	12 493
<b>2008-09</b>	47 925	954 473	4 102	4 594	107 004	44 119	131 144	31 254	32 258	464	12 852
<b>2009-10</b>	r48 691	r882 969	4 667	r3 546	r85 058	r31 503	r125 195	r34 819	r29 961	167	r13 482
<b>2009</b>											
June	12 279	241 498	1 069	839	25 174	9 561	33 688	8 275	7 666	32	3 243
September	11 958	230 695	1 474	1 260	18 708	6 813	30 939	6 813	7 625	58	3 482
December	12 421	226 420	1 226	1 023	27 768	10 416	38 124	9 455	7 222	57	3 722
<b>2010</b>											
March	10 076	r177 693	609	582	r23 202	7 183	r25 392	7 315	r7 155	32	r2 961
June	r14 237	r248 160	r1 357	r681	r15 380	r7 091	r30 740	r11 236	r7 959	20	r3 317
September	15 365	238 435	2 536	485	14 965	6 485	29 926	8 415	9 015	28	3 567

r revised

(a) Compiled from Australian Customs Service data. Refer to the Explanatory Notes for further information.

(b) Export data may be subject to revision.

(c) Includes buffalo meat.

(d) Cured carcass weight, and state net weight of packs of canned bacon and ham. Refer to the Explanatory Notes for further information.

(e) Canned meat excludes bacon and ham. Refer to the Explanatory Notes for further information.

## EXPORTS OF LIVE SHEEP AND CATTLE (a), Australia: Original

Period	Number	Gross weight	Gross value	Unit value(b)
	'000	'000 tonnes	\$'000	\$
.....				
SHEEP				
<b>2007-08</b>	4 069.0	197.0	286 442	70.40
<b>2008-09</b>	4 063.9	199.0	339 083	83.44
<b>2009-10</b>	3 055.4	145.9	296 763	97.13
<b>2009</b>				
June	878.1	42.8	77 751	88.55
September	801.8	38.7	76 827	95.82
December	1 030.0	50.1	93 851	91.12
<b>2010</b>				
March	708.3	33.3	68 408	96.59
June	515.3	23.9	57 677	111.93
September	862.6	39.3	104 448	121.09
.....				
CATTLE				
<b>2007-08</b>	713.3	241.2	450 511	631.63
<b>2008-09</b>	856.0	285.0	558 695	652.67
<b>2009-10</b>	r905.5	r310.2	r601 209	r663.95
<b>2009</b>				
June	231.8	80.5	141 817	611.80
September	258.5	86.4	161 035	622.84
December	260.7	90.8	172 174	660.37
<b>2010</b>				
March	r203.1	r69.5	r147 857	r727.97
June	r183.1	r63.5	r120 143	r656.08
September	216.6	71.0	148 338	684.88

r revised

(a) Export data may be subject to revision.

(b) Gross value divided by the number of animals exported

## WHOLE MILK INTAKE, by Factories(a): All Series

	New South Wales(b)	Victoria	Queensland	South Australia(c)	Western Australia	Tasmania	Australia
Quarter	ML	ML	ML	ML	ML	ML	ML
ORIGINAL							
<b>2009</b>							
March	251	1 364	125	148	78	186	2 153
June	247	1 083	120	145	77	124	1 797
September	283	1 480	139	147	84	119	2 252
December	294	1 886	142	177	101	249	2 849
<b>2010</b>							
March	253	1 269	128	142	82	174	2 048
June	244	1 150	121	140	83	132	1 870
SEASONALLY ADJUSTED							
<b>2009</b>							
March	268	1 528	131	157	87	178	2 349
June	272	1 496	132	157	83	177	2 316
September	274	1 442	133	154	83	166	2 250
December	262	1 389	131	151	88	162	2 184
<b>2010</b>							
March	270	1 429	133	151	90	158	2 231
June	269	1 575	133	150	90	197	2 414
TREND							
<b>2009</b>							
March	268	1 527	130	157	85	177	2 345
June	272	1 488	132	156	84	174	2 305
September	273	1 433	132	154	84	166	2 242
December	272	1 420	132	152	87	163	2 227
<b>2010</b>							
March	271	1 456	133	151	89	170	2 269
June	269	1 516	133	150	91	181	2 340

(a) Includes whole milk equivalent of farm cream intake.  
Refer to the Explanatory Notes for further information.

(b) Includes data for the Australian Capital Territory.

(c) Includes data for the Northern Territory.

Source: Original series data from Dairy Australia.

## MARKET MILK SALES, by Factories(a): All Series

Quarter	New South Wales(b)	Victoria	Queensland	South Australia(c)	Western Australia	Tasmania	Australia
	ML	ML	ML	ML	ML	ML	ML
ORIGINAL							
<b>2009</b>							
March	172	131	127	51	59	14	553
June	176	136	128	53	59	14	567
September	180	141	132	55	62	14	583
December	182	134	125	55	63	14	572
<b>2010</b>							
March	176	133	124	r53	61	14	r559
June	180	138	123	54	61	14	571
SEASONALLY ADJUSTED							
<b>2009</b>							
March	175	133	129	52	60	14	563
June	175	134	129	53	60	14	564
September	176	139	128	53	61	14	571
December	184	135	126	55	62	14	577
<b>2010</b>							
March	178	135	125	54	62	14	568
June	178	136	124	54	62	14	569
TREND							
<b>2009</b>							
March	174	134	128	52	60	14	562
June	175	134	129	53	60	14	565
September	176	135	128	54	61	14	567
December	177	135	126	54	62	14	569
<b>2010</b>							
March	178	135	125	54	62	14	569
June	178	136	124	54	62	14	569

r revised

(a) Includes white, flavoured, high and low fat milk and UHT milk. Refer to the Explanatory Notes for further information.

(b) Includes data for the Australian Capital Territory.

(c) Includes data for the Northern Territory.

Note: Source: Original series data from Dairy Australia.

## BROKERS AND DEALERS RECEIVALS OF TAXABLE WOOL(a): All series

Quarter	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania	Australia	% of total received by brokers
	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	tonnes	%
ORIGINAL								
<b>2009</b>								
June	25 102	18 833	3 363	10 893	14 767	2 419	75 378	77.3
September	32 534	19 880	3 072	12 344	15 585	2 756	86 170	82.5
December	31 358	29 135	2 190	17 318	23 032	3 000	106 033	79.7
<b>2010</b>								
March	26 688	21 369	1 212	12 572	25 572	1 925	89 339	77.8
June	25 497	19 142	2 343	9 206	12 412	2 594	71 195	78.6
September	28 546	19 860	2 237	12 494	16 993	3 046	83 176	80.8
SEASONALLY ADJUSTED								
<b>2009</b>								
June	28 134	22 274	2 764	13 073	21 368	2 480	90 093	..
September	28 615	21 749	2 477	11 473	17 263	2 478	84 056	..
December	29 589	23 056	2 520	15 768	20 231	2 568	93 733	..
<b>2010</b>								
March	29 262	21 966	1 803	12 535	20 304	2 618	88 489	..
June	28 550	22 449	1 901	11 302	18 075	2 636	84 913	..
September	25 233	21 903	1 850	11 658	18 902	2 692	82 237	..
TREND								
<b>2009</b>								
June	28 764	22 392	2 718	12 221	20 280	2 417	88 791	..
September	28 830	22 353	2 582	11 966	19 560	2 507	87 799	..
December	29 290	22 319	2 299	11 712	19 290	2 564	87 474	..
<b>2010</b>								
March	29 076	22 383	2 039	11 728	19 412	2 608	87 245	..
June	27 877	22 225	1 868	11 755	19 142	2 651	85 518	..
September	26 475	21 993	1 794	11 637	18 504	2 670	83 073	..

.. not applicable

(a) Taxable receivals only. Refer to the Explanatory Notes for further information.

## EXPLANATORY NOTES

### INTRODUCTION

**1** This publication contains information on livestock slaughterings, meat production, exports of live sheep and cattle, exports of fresh, chilled, frozen and processed meat, whole milk intake by factories, market milk sales by factories and receipts of taxable wool by wool brokers and dealers.

**2** At the time of publication, final estimates of slaughter and production for poultry for the September quarter 2010 were not yet available. These data, including updated seasonally adjusted and trend estimates, will be published in the next issue.

**3** Data in this publication have been revised where necessary and as a consequence may not agree with similar data shown in previous publications.

**4** Where figures have been rounded, discrepancies may occur between sums of the component items and totals.

**5** Unless otherwise indicated, Australian totals include data for all states/territories.

### LIVESTOCK SLAUGHTERINGS AND MEAT PRODUCTION

**6** The statistics on slaughterings for red meat production are based on a monthly collection from abattoirs and other major slaughtering establishments and include estimates of animals slaughtered on farms, by country butchers and other small slaughtering establishments.

**7** Livestock slaughter and meat production estimates published in previous editions of this publication (excluding chickens) included a small, stable component to represent the on-farm slaughter of livestock. Following a quality review of the Livestock Slaughtered collection and consultation with key users of these data, on-farm slaughter has now been removed. Historical data back to July 2007 have been revised for all series.

**8** The quality review has also aligned the Livestock Slaughtered collection's calf and pig definitions to current industry standards.

**9** The farm-kill and definitional changes, above, impact on livestock slaughtering and meat production estimates (excluding chickens) published in this and future editions of Livestock Products, Australia. Related estimates published in Livestock and Meat, Australia (cat. no. 7218.0.55.001) are also affected.

**10** As a result of these changes, the livestock slaughter and meat production estimates included in this release cannot be directly compared to those published in previous editions. To assist users in accounting for the associated breaks in time series, historical estimates to June 2007 (excluding farm-kill) and to June 2009 (revised calf definitions) have been re-based. Additional time series data are available via the Downloads tab of this publication on the ABS website <<http://www.abs.gov.au>>.

**11** Further information on the new methodology and revised definitions may be obtained by contacting The Environment and Agriculture Business Statistics Centre, Australian Bureau of Statistics, GPO Box 66, Hobart TAS 7001. Alternatively, email <[agriculture.statistics@abs.gov.au](mailto:agriculture.statistics@abs.gov.au)> or phone (03) 6222 5940.

**12** Red meat is shown in carcass weight and excludes offal.

**13** Care should be taken when using this information as the data only relate to slaughterings for human consumption and do not include animals condemned, slaughtered for pet food or those killed for boiling down.

**14** Statistics for poultry slaughterings and chicken meat produced have been compiled from quarterly returns supplied by commercial poultry slaughtering establishments and comprise boilers, fryers and roasters. Many small producers are excluded from the collection; however, the statistics represent a high level of coverage.

**15** Chicken meat is shown in dressed weight of whole birds, pieces and giblets.

## EXPLANATORY NOTES *continued*

### LIVESTOCK SLAUGHTERINGS AND MEAT PRODUCTION *continued*

**16** Details about unpublished slaughterings and meat production statistics can be found in the Livestock Slaughtering Collection brief on the Australian Bureau of Statistics (ABS) website and also are available on request. Inquiries should be made to the *National Information and Referral Service* on 1300 135 070.

### EXPORTS OF FRESH, CHILLED, FROZEN AND PROCESSED MEAT

**17** International trade statistics are compiled by the ABS from information submitted to the Australian Customs Service by exporters and importers or their agents. Factors are applied to beef, veal, mutton and lamb bone-out figures to calculate a derived bone-in carcass weight. The derived bone-in carcass weights are then added to bone-in figures to calculate total exports in carcass weight. The factor for beef and veal is 1.5 and for mutton and lamb, 2.0. This information is sourced from the Australian Department of Agriculture, Fisheries and Forestry.

**18** Beef also includes buffalo meat.

**19** Bacon and ham shown is the cured carcass weight of smoked or cooked bacon and ham. It also includes the stated net weight of packs of canned bacon and ham.

**20** Canned meat is shown as the canned weight and excludes canned bacon and ham.

### LIVE SHEEP AND CATTLE EXPORTS

**21** Sheep and cattle exported for breeding are excluded.

**22** The unit value is obtained by dividing the gross value by the number of animals exported.

**23** The graphs of livestock exports present quarterly original estimates for at least the last five years for the major commodities. These graphs highlight the major movements in the estimates over that period.

### MILK

**24** Milk data collected by Dairy Australia. Data for the latest quarter are not yet available.

**25** Whole milk intake by factories includes the whole milk equivalent of farm cream intake.

**26** Market sales includes white, flavoured, high and low fat milk and ultra heat treatment (UHT) milk. Interstate transfers of UHT milk have been included in their state of destination. UHT milk is milk that is heated to high temperatures to produce a milk which does not require refrigeration for a sustained period of time when unopened.

### WOOL RECEIVALS

**27** Wool receivals refers to the amount of taxable wool received by brokers and purchased by dealers from wool producers. It excludes wool received by brokers on which tax has already been paid by other dealers (private buyers) or brokers.

**28** From the September quarter 2010, inclusive, an updated sampling frame was introduced in respect of the Wool Receivals, Purchases and Sales collection. The impact of this change on associated time series is negligible.

**29** Data are based on the state in which wool has been received, and do not necessarily reflect the production of wool in that state.

### SEASONAL ADJUSTMENT

**30** Seasonal adjustment is a means of removing the estimated effects of normal seasonal variation from the series so that the effects of other influences can be more clearly recognised.

**31** In the seasonal adjustment of the livestock estimates, account has been taken of both normal seasonal factors and 'trading day' effects, where significant. Seasonal adjustment does not remove from the series the effect of irregular influences (e.g. abnormal weather, industrial disputes).

**32** The state component series has been seasonally adjusted independently. Therefore, the adjusted components may not add to the Australian group totals.



## EXPLANATORY NOTES *continued*

### SEASONAL ADJUSTMENT

*continued*

**33** In this publication, the seasonally adjusted estimates are produced by the concurrent seasonal adjustment method which takes account of the latest available original estimates. This method improves the estimation of seasonal factors and, therefore, the seasonally adjusted and trend estimates for the current and previous months. As a result of this improvement, revisions to the seasonally adjusted and trend estimates will be observed for recent periods. A more detailed review is conducted annually prior to the September release, using data up to and including the August release.

**34** For further information, see *Time Series Analysis Frequently Asked Questions, 2003* (cat. no. 1346.0.55.002).

**35** From September 2007, improved methods of producing seasonally adjusted estimates, focused on the application of Autoregressive Integrated Moving Average (ARIMA) modelling techniques, were implemented. The ARIMA modelling technique can be used to extend original estimates beyond the end of a time series.

**36** For further information on ARIMA modelling, see the feature article 'Use of ARIMA modelling to reduce revisions' in *Australian Economic Indicators, Oct 2004* (cat. no. 1350.0).

### TREND ESTIMATES

**37** The graphs of livestock slaughtered, meat production and livestock products present quarterly trend estimates for at least the last five years for the major commodities. These graphs highlight the major movements in the estimates over that period.

**38** A trend estimate is obtained by reducing the irregular component in the seasonally adjusted series. For quarterly data, trend estimates are derived by applying a 7-term Henderson moving average to the seasonally adjusted series. Revisions of trend estimates will also occur with revisions to the original data and re-estimation of seasonal factors.

**39** The state component series has been adjusted independently. Therefore, the adjusted components may not add to the Australian group totals.

**40** For further information, see *Information Paper: A Guide to Interpreting Time Series - Monitoring Trends, 2003* (cat. no. 1349.0).

### RELATED PUBLICATIONS

**41** Other ABS publications containing livestock data include:

- *Agricultural Commodities, Australia* (cat. no. 7121.0)
- *Agricultural Commodities: Small Area Data, Australia* (cat. no. 7125.0)
- *Livestock and Meat, Australia* (cat. no. 7218.0.55.001)
- *Value of Agricultural Commodities Produced, Australia* (cat. no. 7503.0)

**42** Current publications and other products released by the ABS are listed under the Statistics and Topics @ a Glance pages on the ABS website <<http://www.abs.gov.au>>. The ABS also issues a daily Release Advice on the website which details products to be released in the week ahead.

### GENERAL ACKNOWLEDGMENT

**43** ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated. Without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the *Census and Statistics Act 1905*.





## FOR MORE INFORMATION . . .

*INTERNET*      **www.abs.gov.au** the ABS website is the best place for data from our publications and information about the ABS.

### INFORMATION AND REFERRAL SERVICE

Our consultants can help you access the full range of information published by the ABS that is available free of charge from our website. Information tailored to your needs can also be requested as a 'user pays' service. Specialists are on hand to help you with analytical or methodological advice.

*PHONE*                      1300 135 070

*EMAIL*                      [client.services@abs.gov.au](mailto:client.services@abs.gov.au)

*FAX*                              1300 135 211

*POST*                          Client Services, ABS, GPO Box 796, Sydney NSW 2001

## FREE ACCESS TO STATISTICS

All statistics on the ABS website can be downloaded free of charge.

*WEB ADDRESS*      [www.abs.gov.au](http://www.abs.gov.au)