

# Limestone Coast Red Meat Cluster (“LCRMC”) Project

**THE LIMESTONE COAST RED MEAT CLUSTER IS BUILDING INDUSTRY LINKAGES AND PROMOTING A CULTURE OF COLLABORATION TO ENSURE A VIBRANT FUTURE FOR THE REGION'S RED MEAT SECTOR.**

The project, overseen by an industry steering committee, is working in a number of areas to develop a deeper understanding of the regional red meat industry, build innovation, grow profitability and enhance skills.

## WORK INCLUDES

- value chain mapping to identify opportunities and impediments to growth, and developing actions to address these;
- detailed regional data analysis to demonstrate the Limestone Coast region's role and strengths in the red meat industry;
- supporting research into production issues such as feed gaps, dark cutting meat and others;
- keeping the wider industry informed of project activities and inviting input, along with supporting other regional initiatives such as the Limestone Coast Collaborative

Macrologic Pty Ltd is analysing the red meat industry in the Limestone Coast area:

- Size and value of the industry
- Livestock flows into and out of the region
- High level performance benchmarking
- Access to web based portal for the group

**If you can't measure it  
you can't manage it**

*The Limestone Coast Red Meat Cluster is funded through PIRSA's Premium Food and Wine Innovation Cluster Program.*

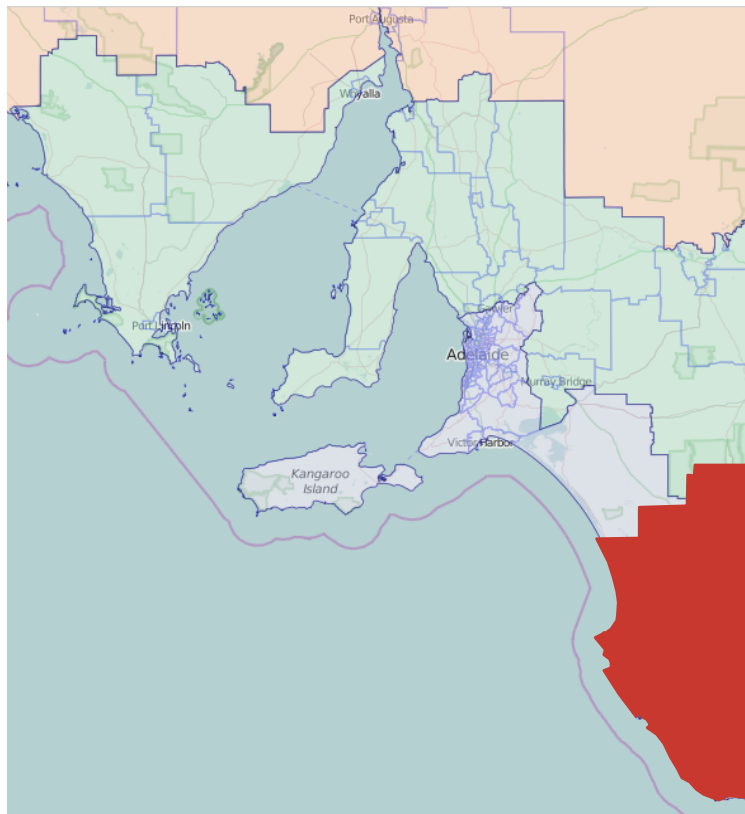
*This presentation is  
an excerpt from the  
full report*

How is the red meat industry measured?
Value of the red meat industry
Performance of the red meat industry
Cattle and sheep numbers
SA slaughter profile
Livestock flows into and out of the region

**How is the red meat industry measured?**

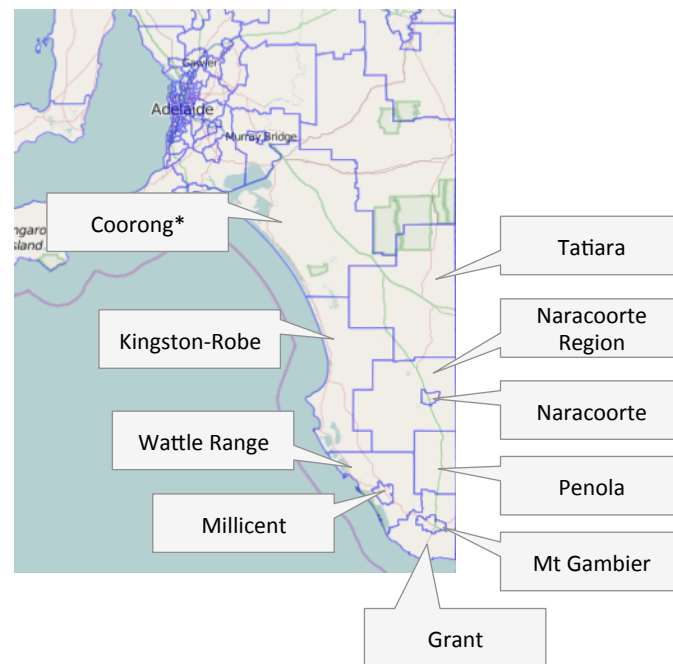
# ABS and ABARES record agriculture in defined areas

ABARES places the Limestone Coast within the “South East” region which is classified as part of the high rainfall zone. Annual Surveys.



- High Rainfall
- Wheat sheep
- Pastoral

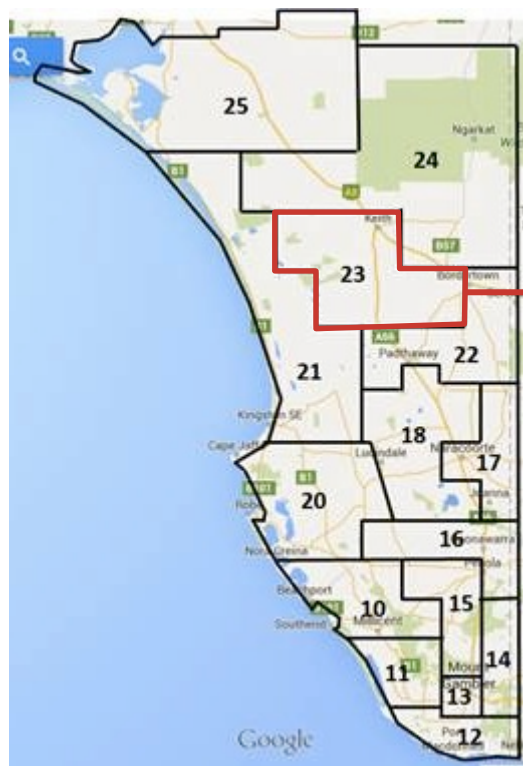
ABS reports at a lower level, conducting a Census every 5 years and annual surveys for a selected sample in the intervening years



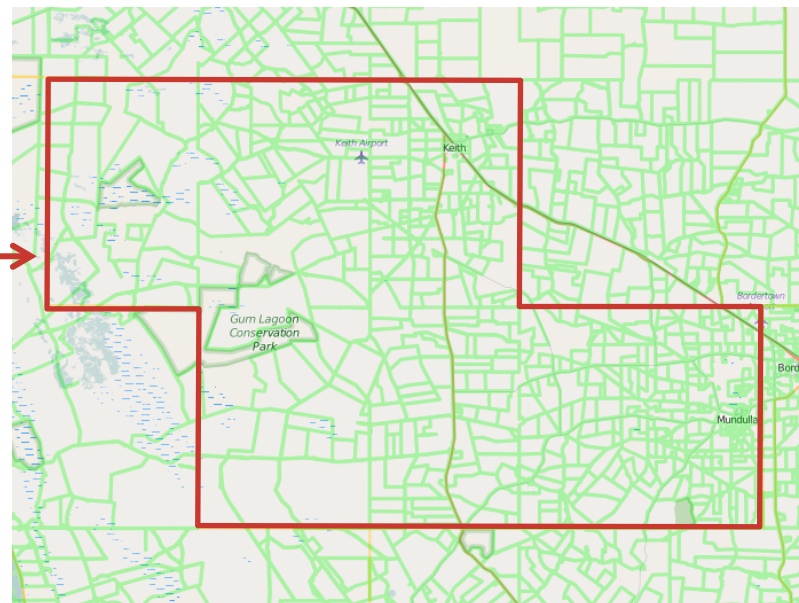
*\* Coorong is technically outside the Limestone Coast region but may be included in the cluster group activities*

# NLIS records livestock movements at property level

NLIS records the daily movements of livestock between properties to the final point of slaughter or live shipment. Data is recorded at property level and summarised into NLIS Zones



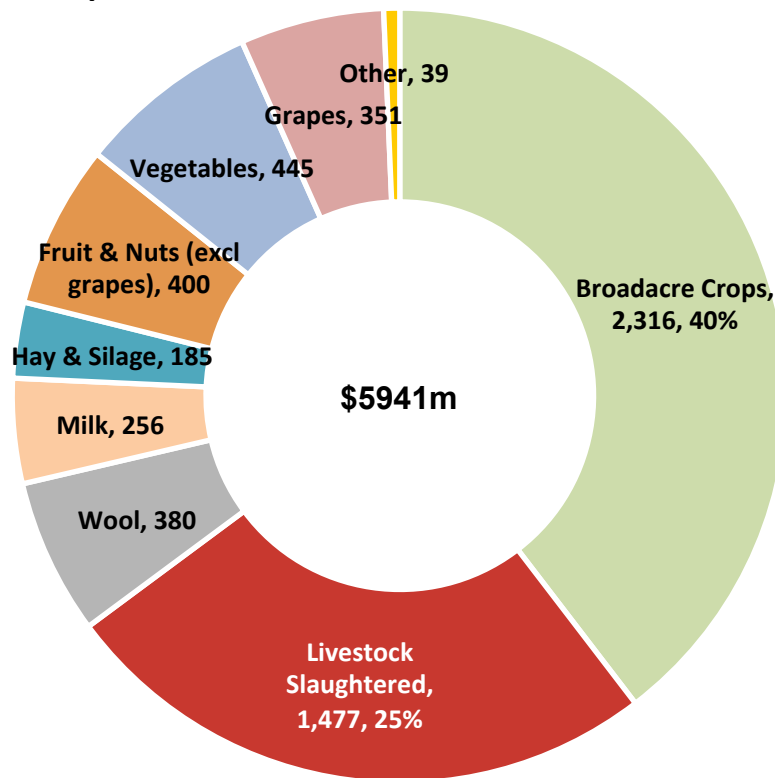
Zone 23



**What is the red meat industry worth?**

# SA Agriculture produces \$6bn at the farm gate

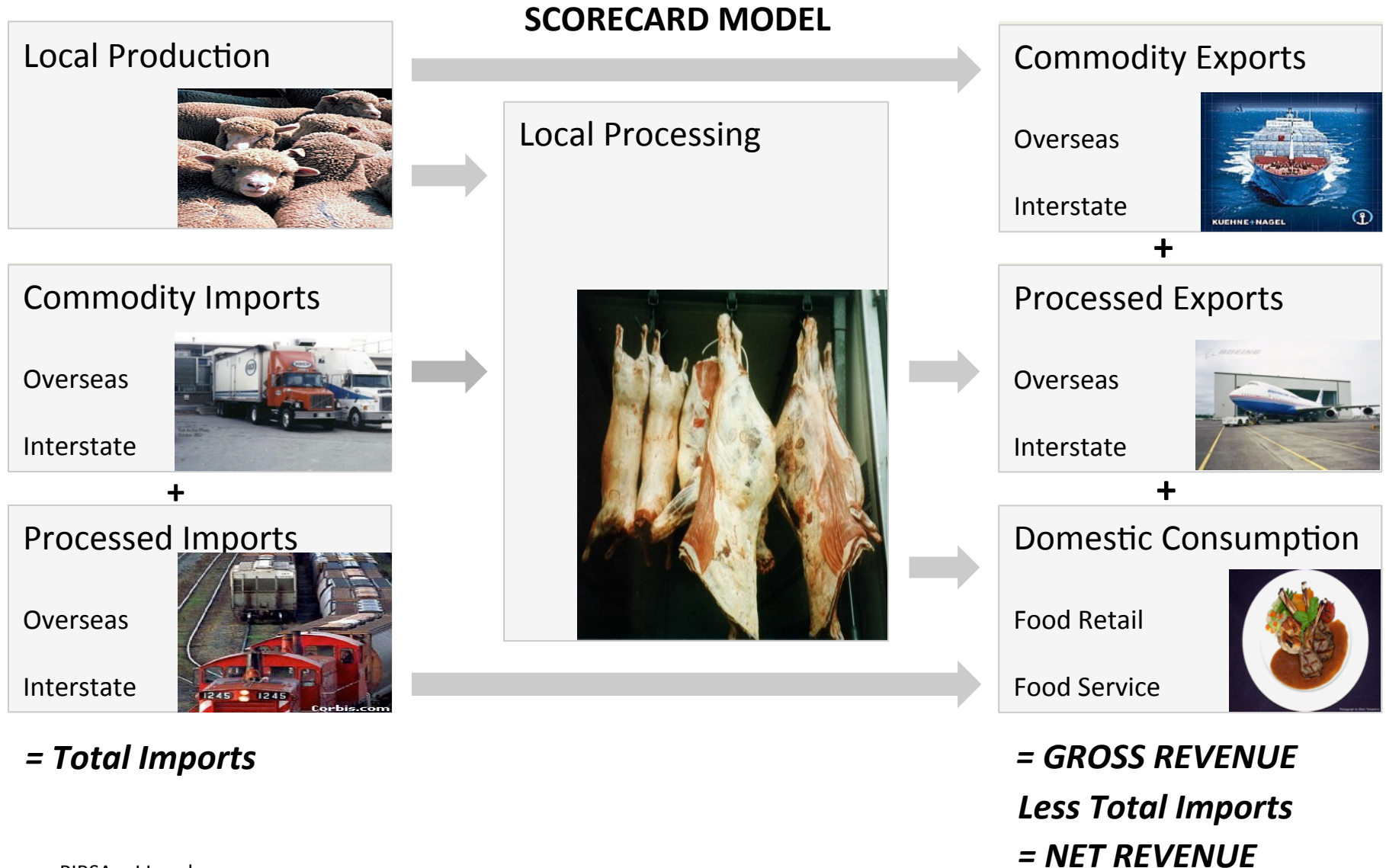
South Aust value of  
agricultural production  
FY14



- Total state value \$6bn
- Livestock (meat) is ~ \$1.5bn or 25%

*Livestock is a large part of a large industry in South Australia*

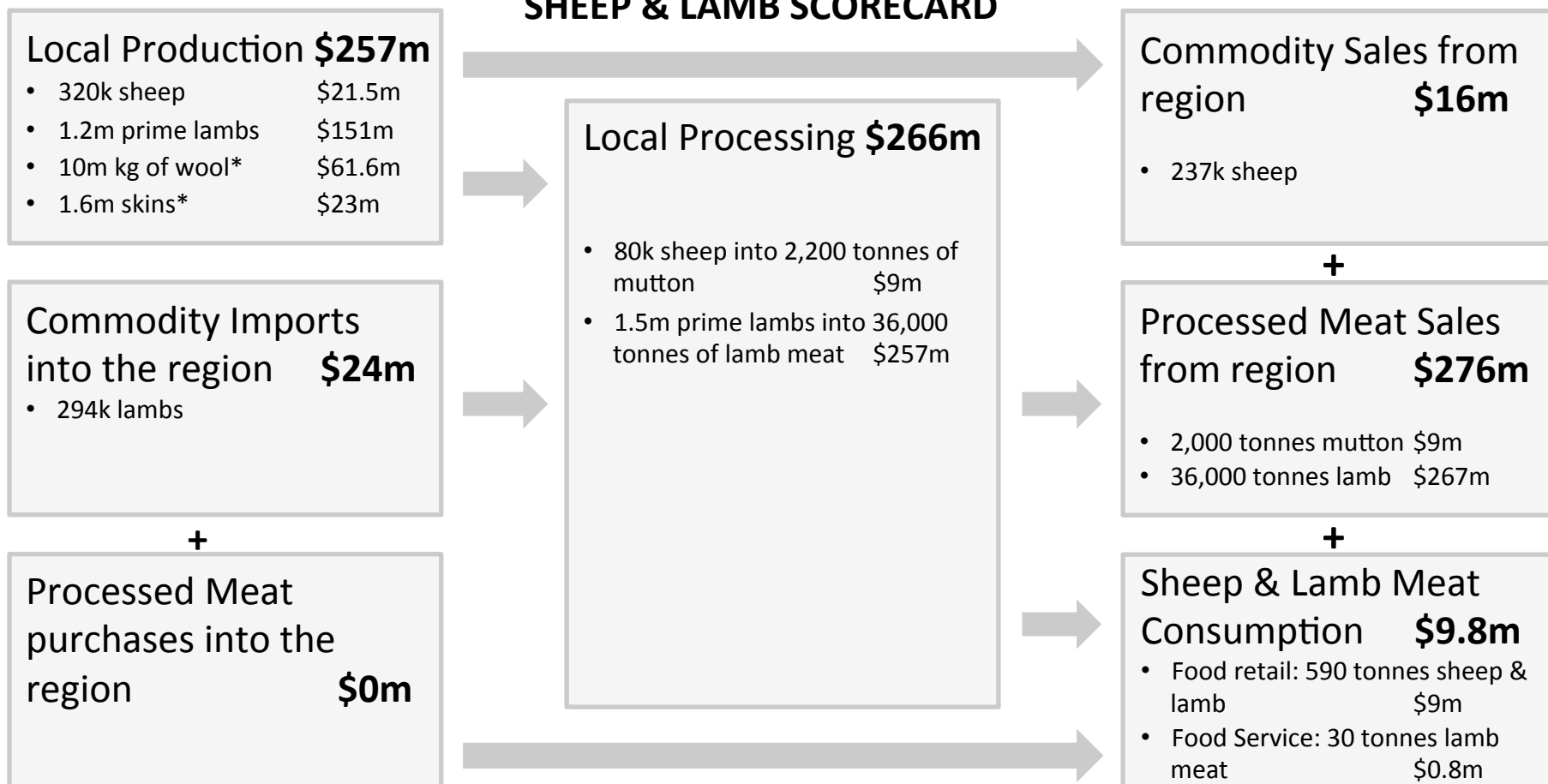
# PIRSA produces a SCORECARD for each region





# Limestone Coast Sheep & Lamb: 2013-14

## SHEEP & LAMB SCORECARD



**= Total Imports \$24m**

\* Wool & skins measured at farm gate are not included in Gross Sheep Meat Revenue

**= Gross Sheep & Lamb Revenue \$301m**

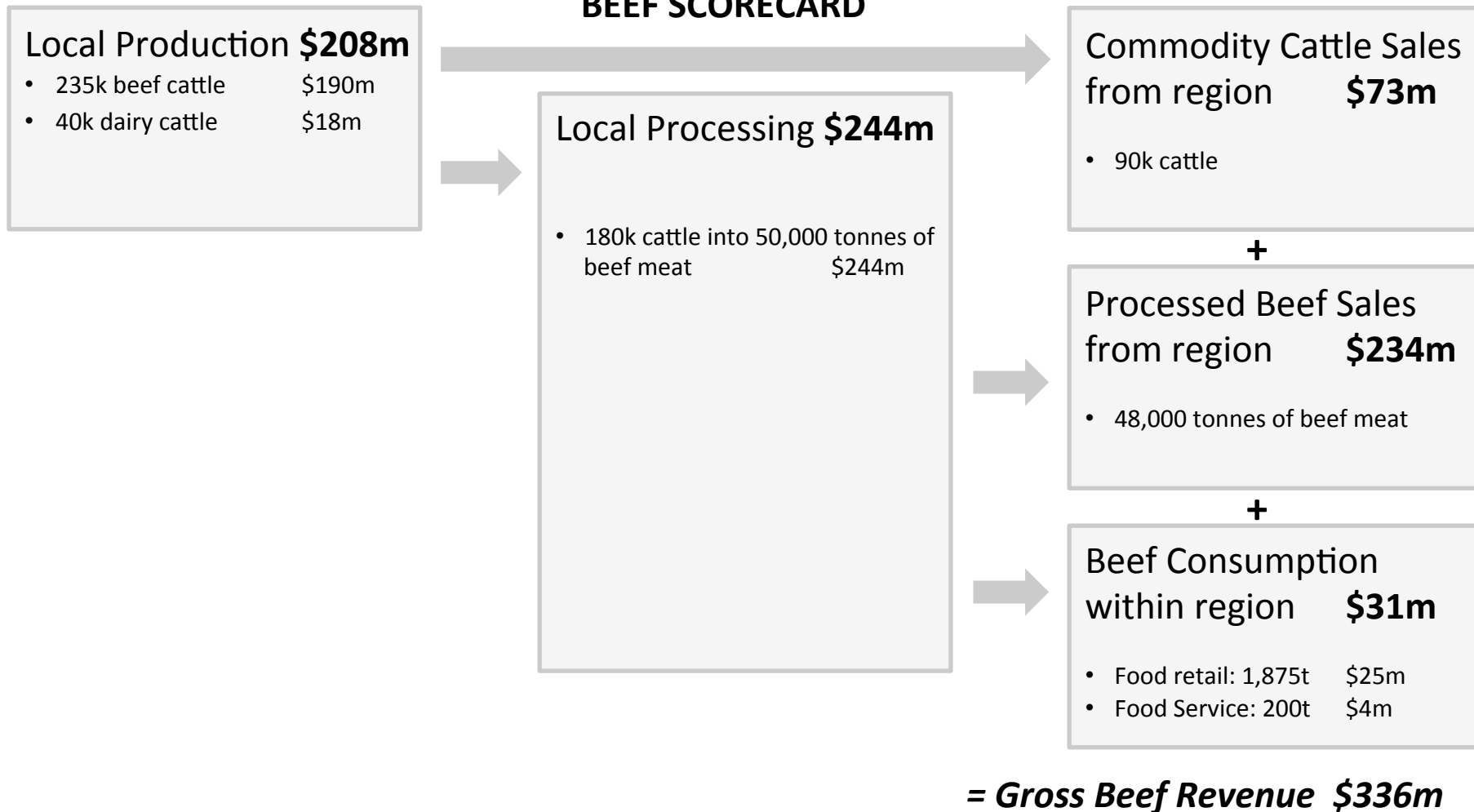
**Less Total Imports \$24m**

**= Net Sheep Revenue \$277m**

Source: PIRSA - J Langberg – values exclude “Coorong” statistics

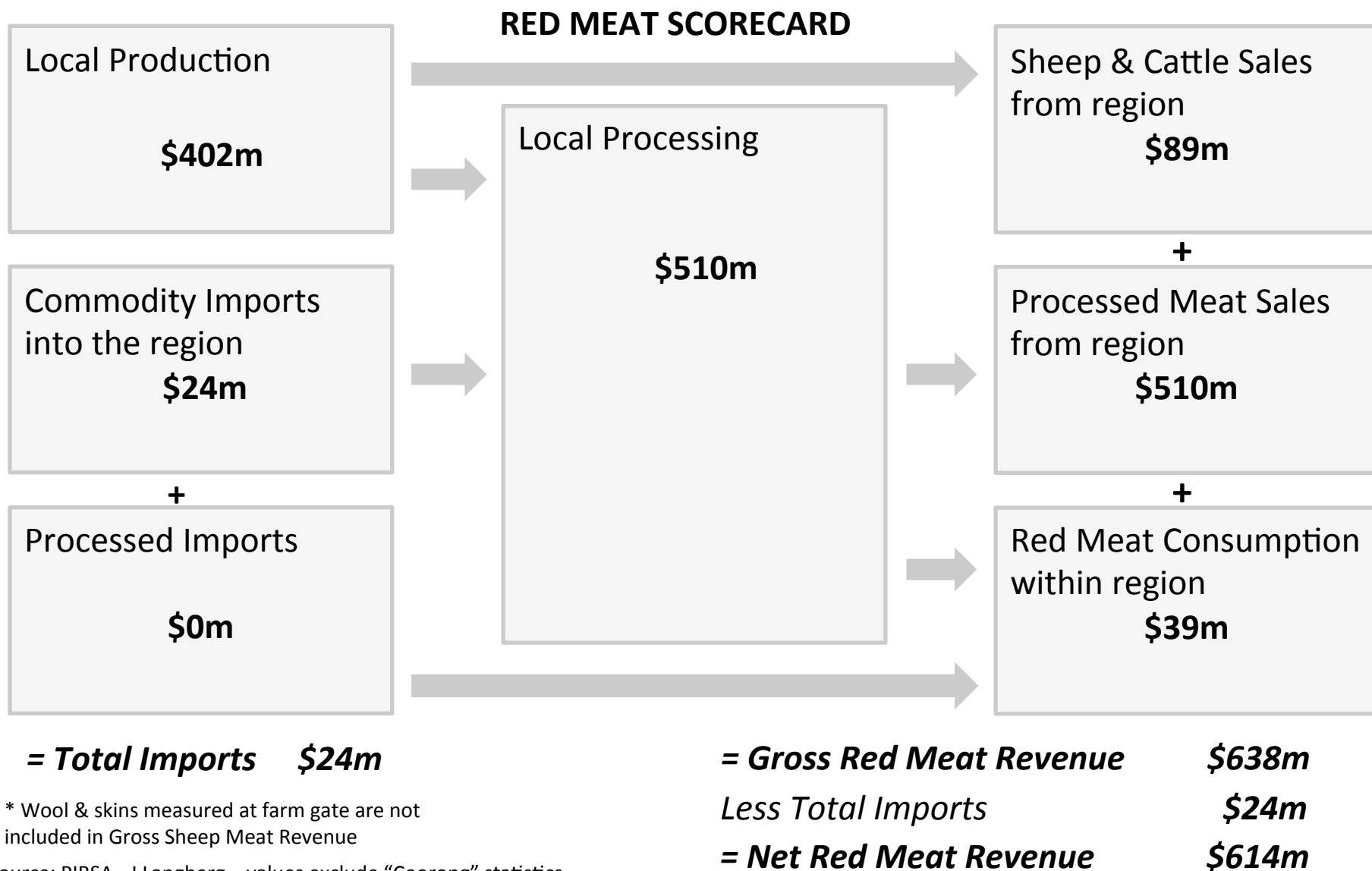
# Limestone Coast Beef: 2013-14

## BEEF SCORECARD



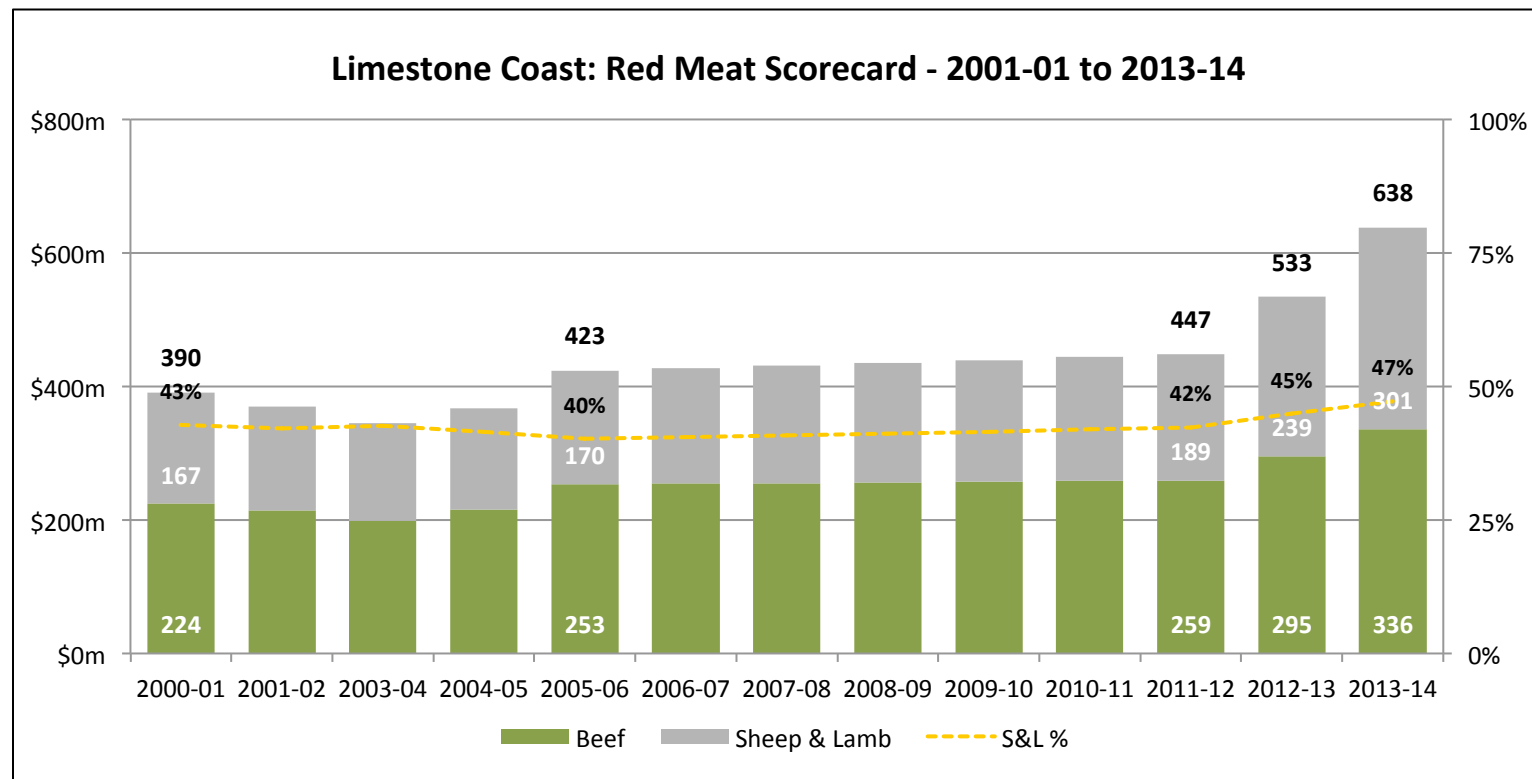
# Limestone Coast Red Meat: 2013-14

## A third of SA's red meat industry



Source: PIRSA - J Langberg – values exclude “Coorong” statistics

# Limestone Coast Red Meat Gross Food Revenue, 2000-01 to 2013-14



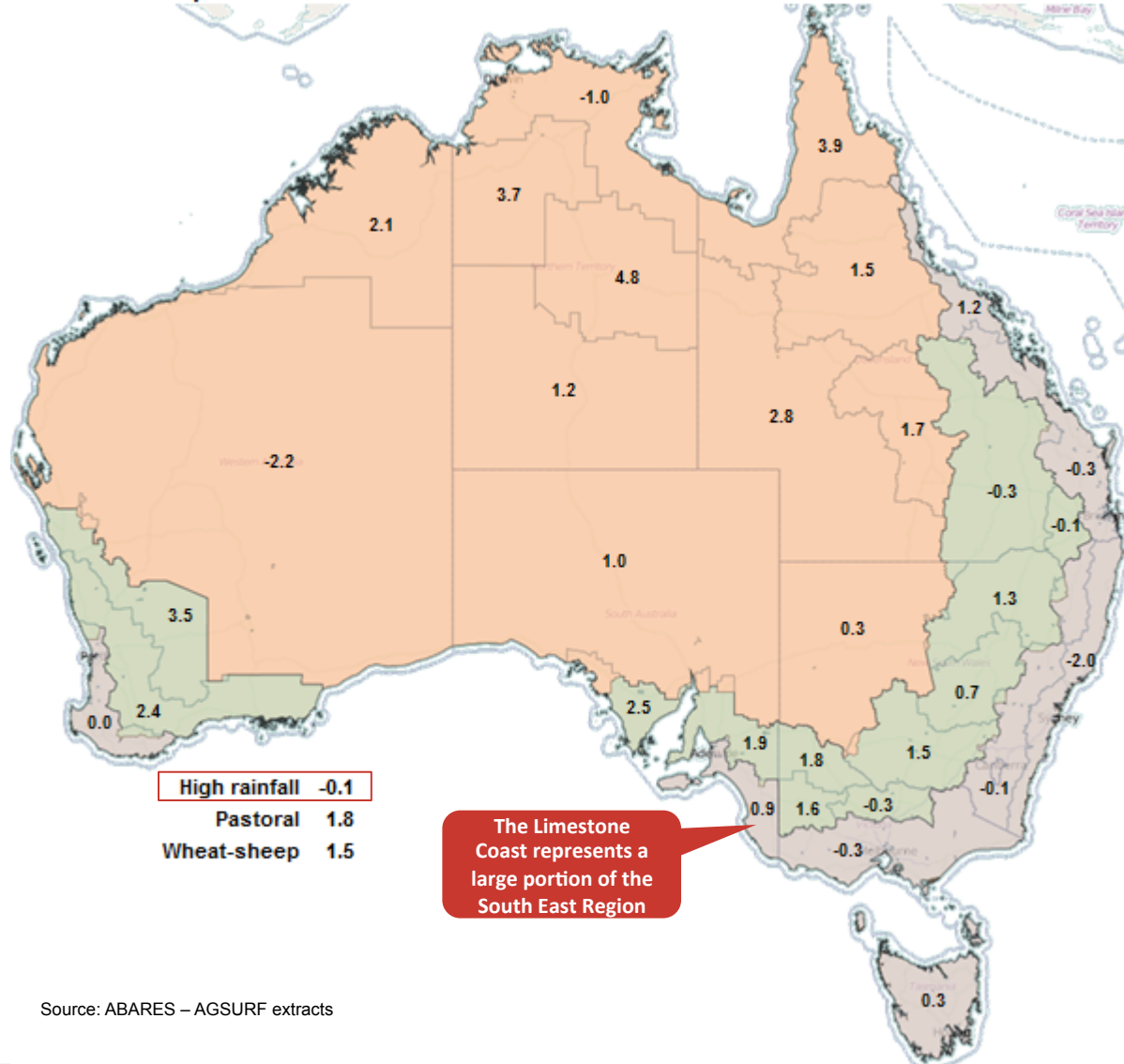
*>60% uplift in value since 2000-01 with Prime Lamb increasing its share*

# Returns from Agriculture and the Red Meat Industry (ABARES Analysis)

1%

# Return on farm assets has averaged 1% over the last 25 years

Return on Capital: 1990 - 2014: 1%



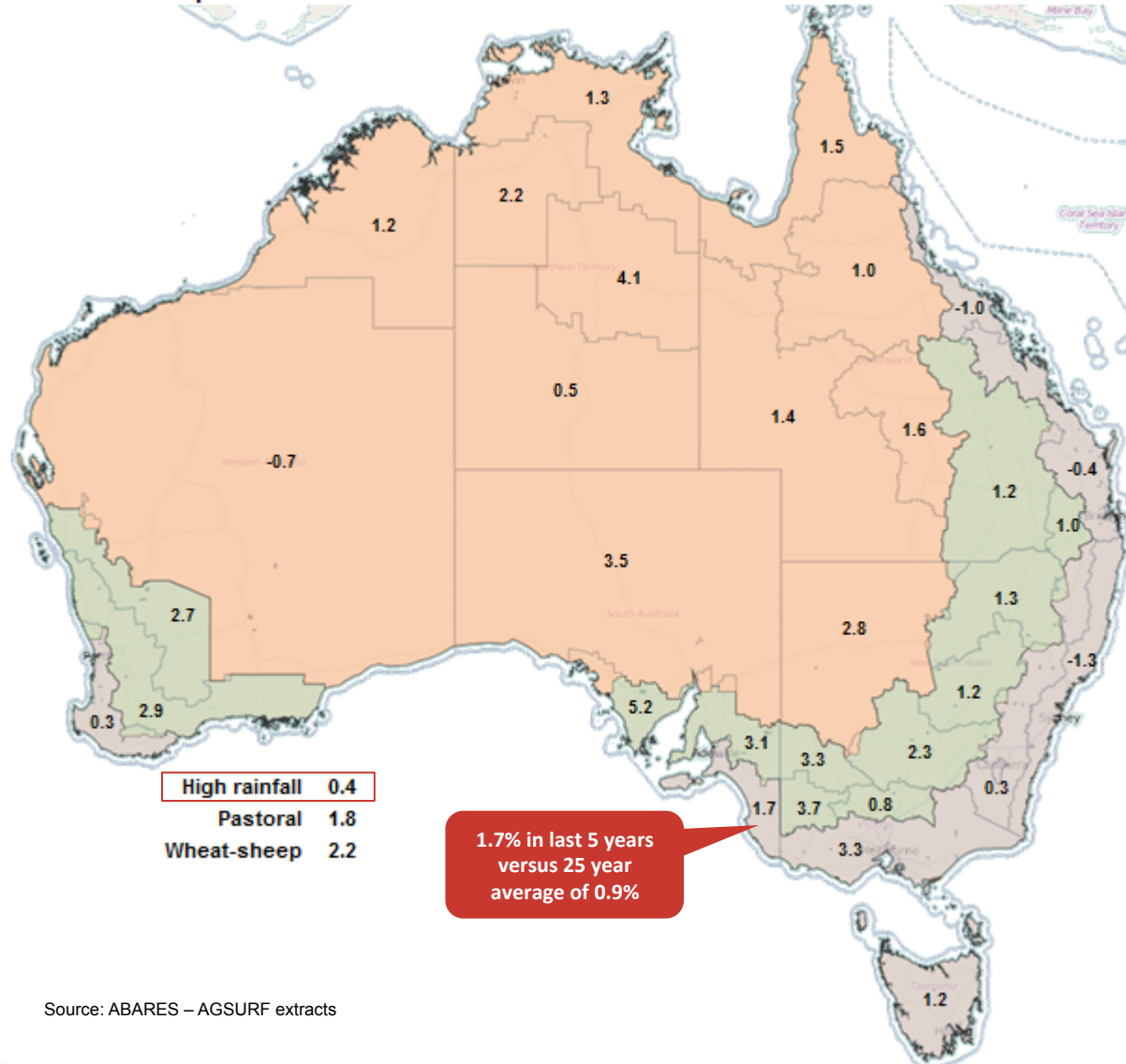
- Ungeared return on farm assets
- South East of SA at 0.9% is aligned with national average ...
- ... but outperforming “High Rainfall” average of -0.1%

*These are the numbers that investors, banks and lessors look at in respect to the farm sector*

Source: ABARES – AGSURF extracts

# Farm returns have improved slightly over the last 5 years but long term averages are more reliable

Return on Capital: 2010 - 2014: 1.6%



High rainfall	0.4
Pastoral	1.8
Wheat-sheep	2.2

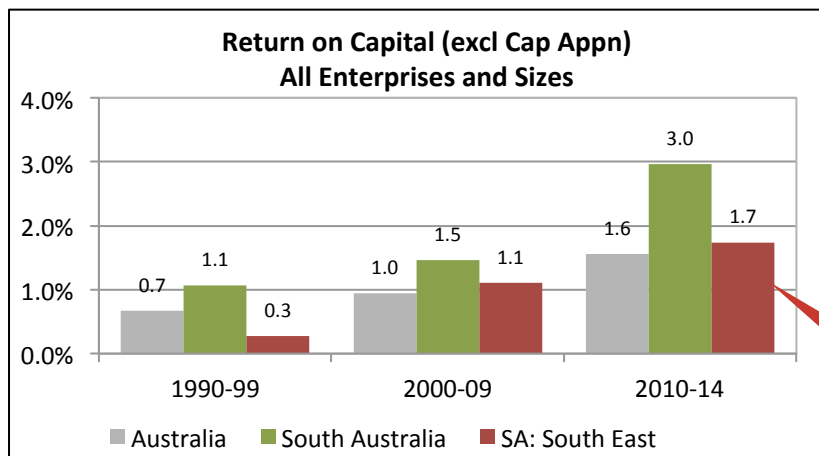
1.7% in last 5 years  
versus 25 year  
average of 0.9%

- South East of SA at 1.7% is aligned with national average ...
- ... but outperforming “High Rainfall” average of 0.4%

Source: ABARES – AGSURF extracts

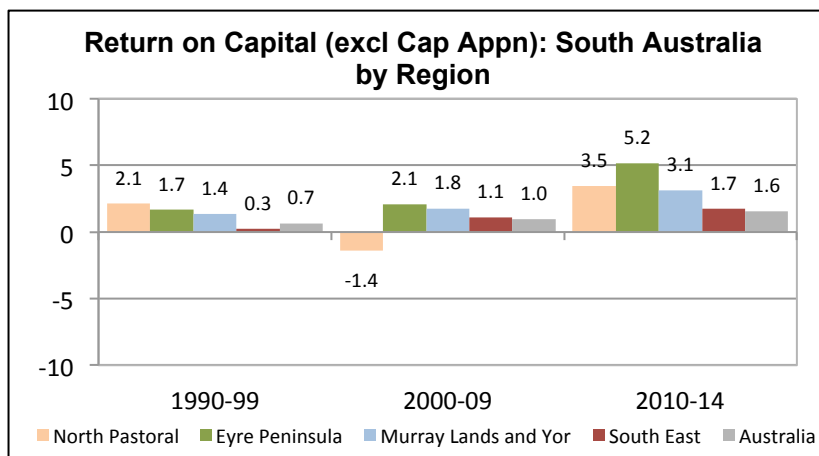


# South Australia outperforms the national average; the South East outperforms for high rainfall zone ...



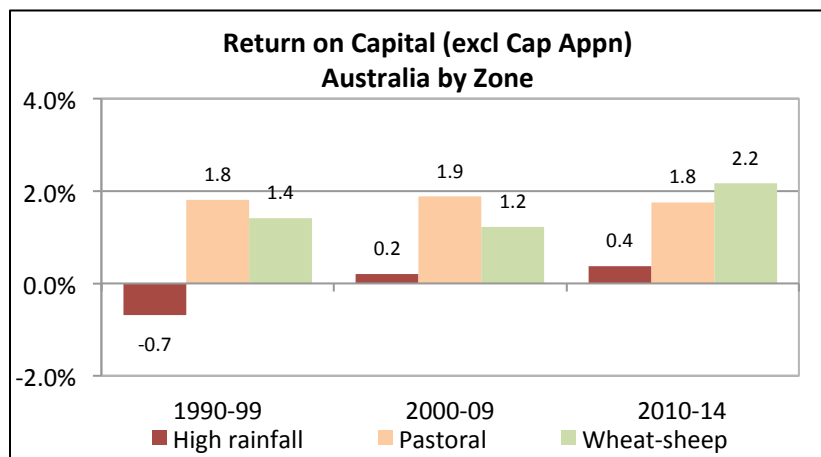
South East

- The average return over the past 25 year is 1%
- SA average return for the same period is 1.6%
- Recent returns show an upward trend
- South East region tracking alongside national average but lagging SA average

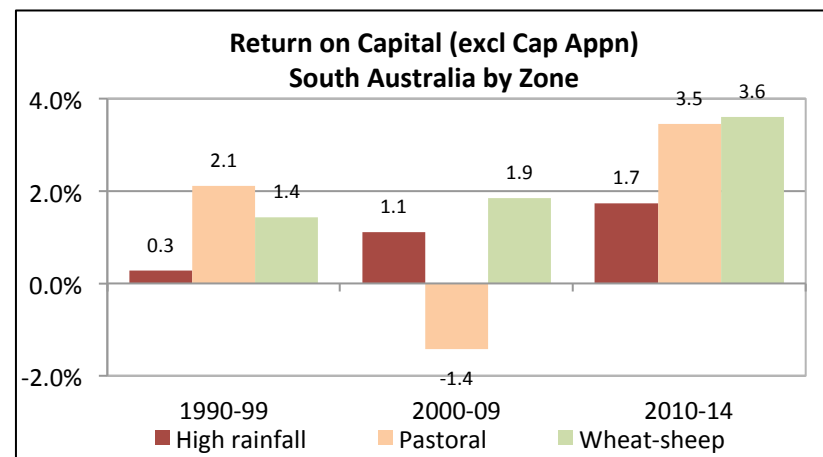


- The South East region has lowest average return on capital of the four SA regions

# The high rainfall zone lags the national average – South Australia outperforms across each zone

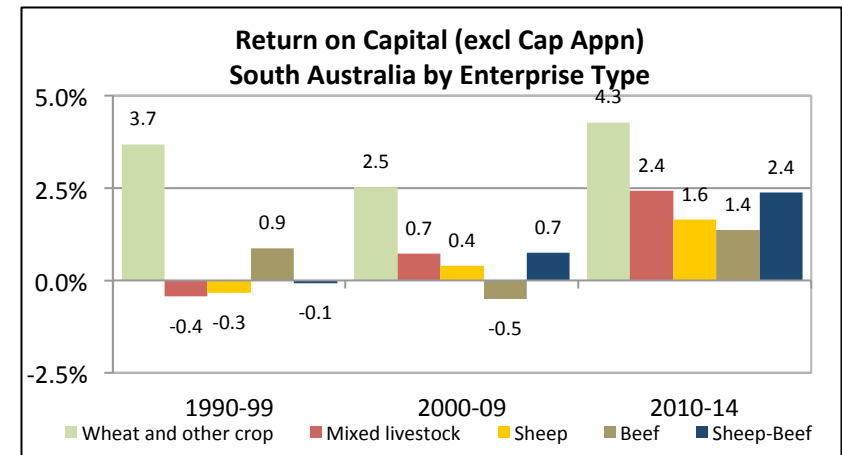
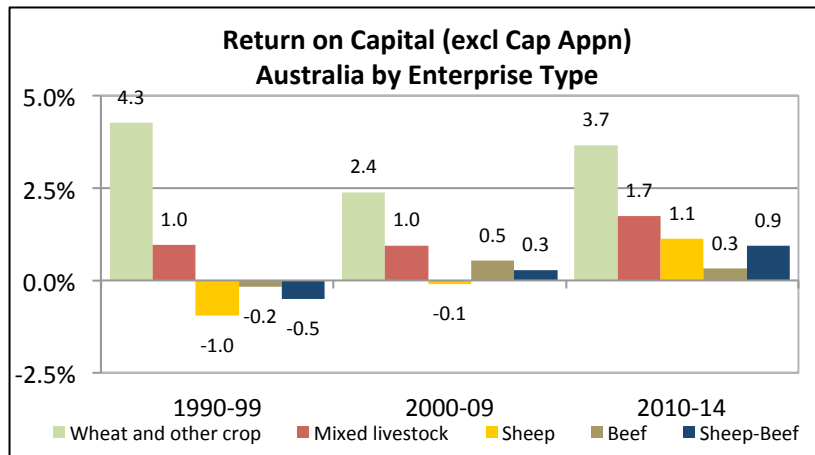


- The high rainfall zone consistently lags the pastoral and wheat-sheep zones



- SA outperforms the national average across all zones other than pastoral in the 2000-09 period

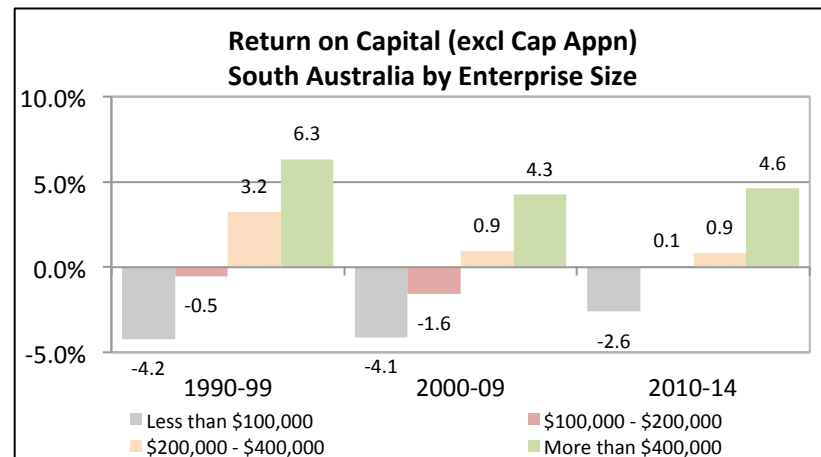
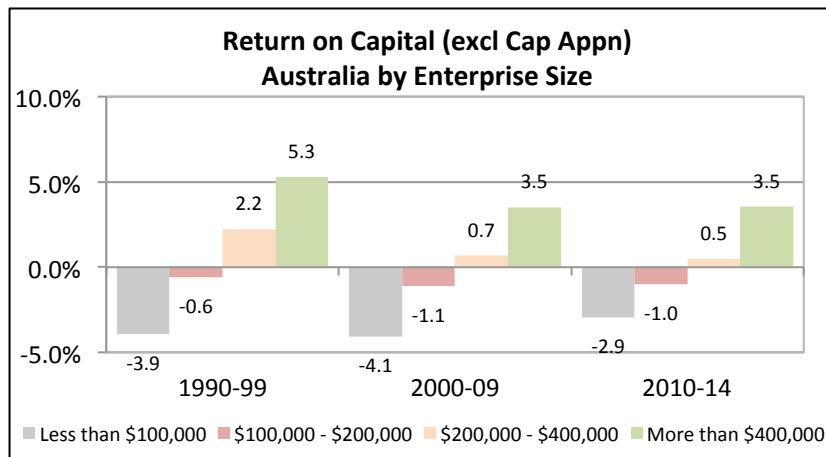
# Cropping consistently outperforms livestock



- Wheat & other crops provide 2% to 3% greater returns compared to the national average
- The last 5 years have seen a marked increase in returns across all enterprise types other than beef – which has just entered a high price cycle

- SA outperforms the national average across all enterprise types in the last 5 years

# Scale is important to achieve higher returns on capital – but available data does not tell the full story



Range =>  
Bottom to top

9.2%

7.6%

6.4%

10.5%

8.4%

7.2%

*... the gap is closing but the average is still low*

# Average returns from agriculture are poor but the impact of management and scale tell a more interesting story

## Average Farm Returns

ABARE 1990 - 2014	Top 25%	All
ROI (excl. Capital App'n)	5%	1%

Indicates a need for productivity, restructuring and recapitalisation

## Return on Assets (excl Cap Gains) – All Zones

AUSTRALIA (Farm Output)	4 <sup>th</sup> Qtl	3 <sup>rd</sup> Qtl	2 <sup>nd</sup> Qtl	1 <sup>st</sup> Qtl	All Farms
\$1m+	0%	4%	7%	14%	6%
\$500k - \$1m	-1%	2%	5%	10%	3%
\$200k - \$500k	-3%	0%	2%	5%	1%
\$40k - \$200k	-9%	-4%	-2%	1%	-2%
All Sizes	-3%	0%	2%	5%	1%

The high-level numbers hide the story:

- The figures show ungeared returns (interested added back)
- Each step up in management performance adds ~2% to 3% to returns
- Each step up in scale adds ~2% to returns
- The impact of scale is significantly higher for the top farm managers: ~4% for each step
- Farmers need capital to scale up but more importantly, need to service the debt or lease required for scale – the alternative is slow growth which is an impediment to the better farmers

*Performance / productivity needs to lift before chasing scale*

Source: ABARES - analysis using a rolling 3 year performance by quartile. NB this table shows broadacre farms only (approx. 70% of total rural). 1990-2007 data updated with AGSURF extracts to 2014 assuming similar performance differentials for the farmer quartiles

# Management and Scale impact in the High Rainfall zone

## Average Farm Returns

ABARE 1990 - 2014	Top 25%	All
ROI (excl. Capital App'n)	3%	0%

Indicates a need for productivity, restructuring and recapitalisation

## Return on Assets (excl Cap Gains) – High Rainfall

AUSTRALIA (Farm Output)	4 <sup>th</sup> Qtl	3 <sup>rd</sup> Qtl	2 <sup>nd</sup> Qtl	1 <sup>st</sup> Qtl	All Farms
\$1m+	0%	3%	4%	8%	3%
\$500k - \$1m	-1%	1%	4%	7%	2%
\$200k - \$500k	-2%	0%	2%	4%	1%
\$40k - \$200k	-8%	-3%	-1%	1%	-2%
All Sizes	-3%	-1%	1%	3%	-0.1%

The high rainfall zone performance:

- Average performance is 1% below national average – marginal
- Top quartile performance 2% below national average
- Each step up in management performance adds ~2% to returns
- Each step up in scale adds ~1% to returns
- The impact of scale is relatively consistent across management quartiles
- Higher capital values may be driven by factors other than productivity – lower seasonal risk, proximity to infrastructure and regional centres, urban creep

*Same message: Performance / productivity needs to lift before chasing scale*

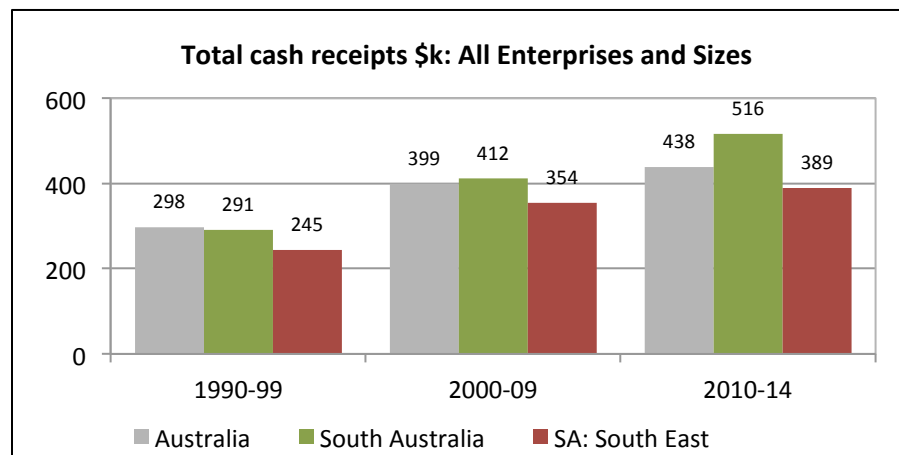
Source: ABARES - analysis using a rolling 3 year performance by quartile. NB this table shows broadacre farms only (approx. 70% of total rural). 1990-2007 data updated with AGSURF extracts to 2014 assuming similar performance differentials for the farmer quartiles

# We need to set achievable targets to improve returns ...

## Return on Assets (excl Cap Gains) – High Rainfall

AUSTRALIA (Farm Output)	4 <sup>th</sup> Qtl	3 <sup>rd</sup> Qtl	2 <sup>nd</sup> Qtl	1 <sup>st</sup> Qtl	All Farms
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\$40k - \$200k	-8%	-3%	-1%	1%	-2%
All Sizes	-3%	-1%	1%	3%	-0.1%

- Farm land is a finite resource with high competition to own / operate
- Lessors get yields of 4% to 5%
- Successful asset managers should be getting 8% to 10%
- Separate operating returns from capital appreciation
- Take a long term view and set achievable targets
- Collaboration is one pathway to improve management and achieve benefits of scale without having to buy more property

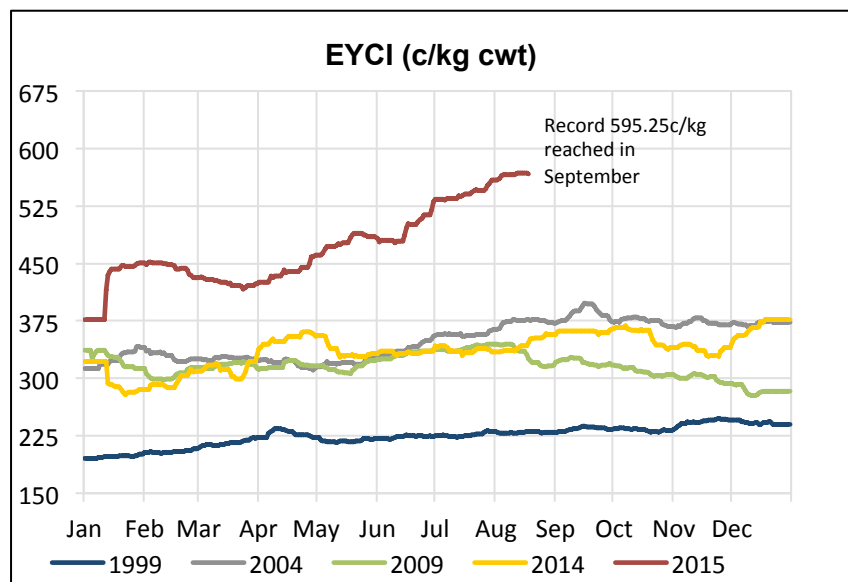


*... build business skills and find ways of achieving scale benefits by operating collaboratively*

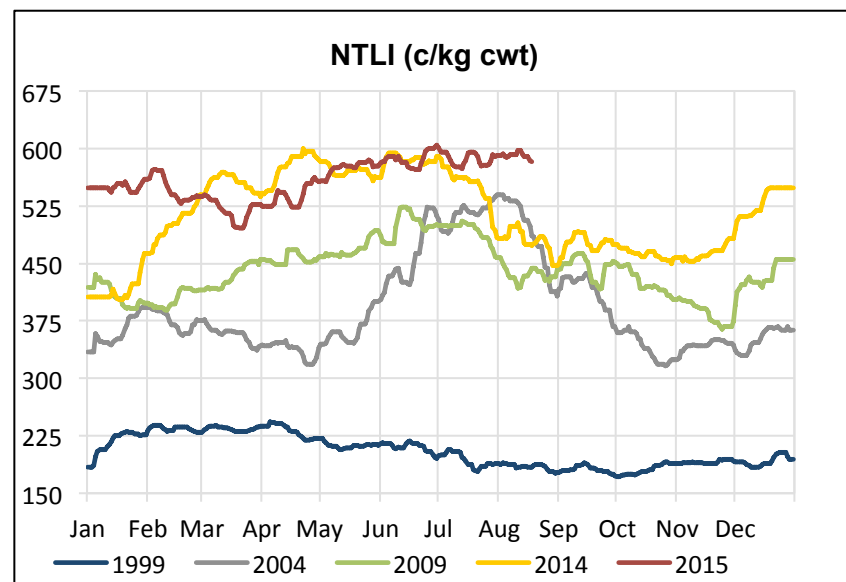
Source: ABARES - analysis using a rolling 3 year performance by quartile. NB this table shows broadacre farms only (approx. 70% of total rural). 1990-2007 data updated with AGSURF extracts to 2014 assuming similar performance differentials for the farmer quartiles

# Some good news: The red meat sector has been given a lift through stronger prices

For livestock producers, the news in the medium term is positive but the sector is arguably going through the top of its current cycle ...



225	350	316	336	471
	56%	-10%	6%	40%

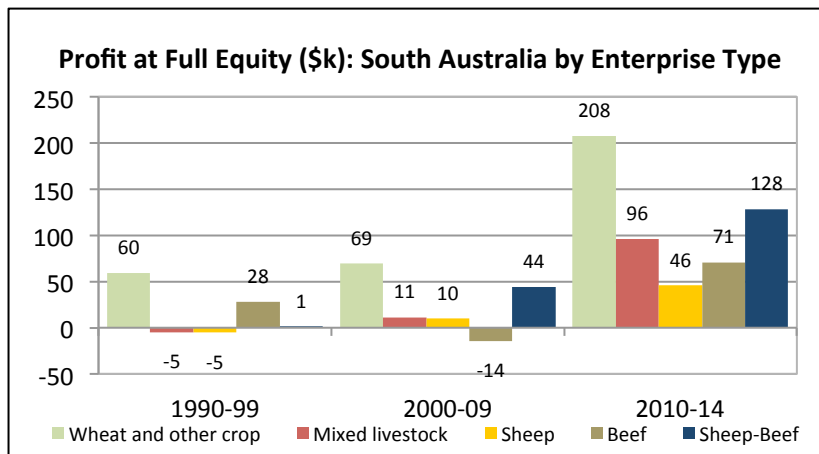
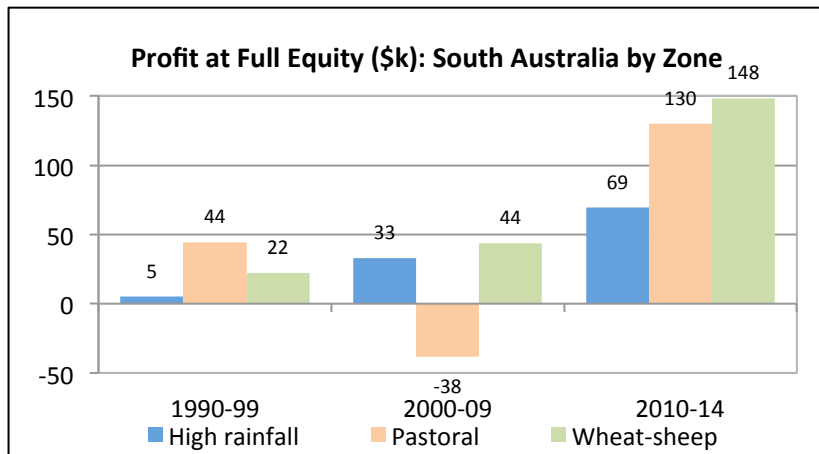


205	392	441	514	560
	92%	12%	17%	9%

*... providing an opportunity to invest in productivity improvements to preserve long term returns as the pricing cycle reverts to historic averages*



# Average profitability in SA and the South East Region



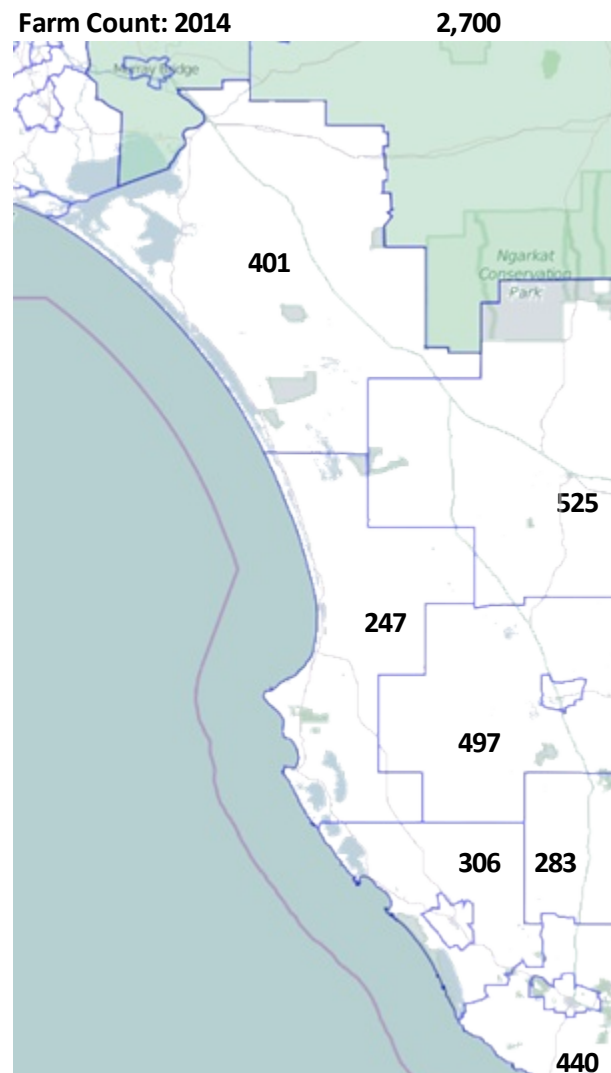
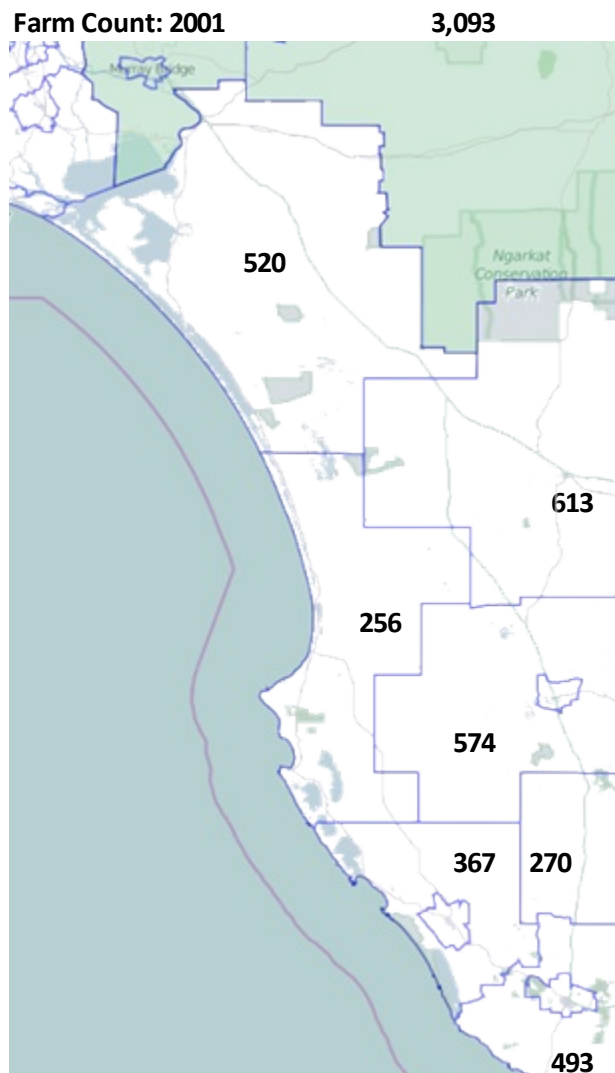
- Average Profit for SA for 2010-14 was \$121k compared to national average of \$68k
- The average profit in the South East region (2010 – 14) was \$69k which represents a 1.7% return on capital
- Implied average capital is ~\$4m (in line with SA and National average)
- Calculated profit allows for estimated labour for owner manager and family labour at Federal Pastoral Industry Award rates
- The South East region average profit is reflective of livestock averages across SA regions

*... set an achievable target for the scale of the business*

# Cattle and sheep numbers

*(ABS Data)*

# ABS: Limestone Coast: Farming Enterprises



Change	
-393	-13%

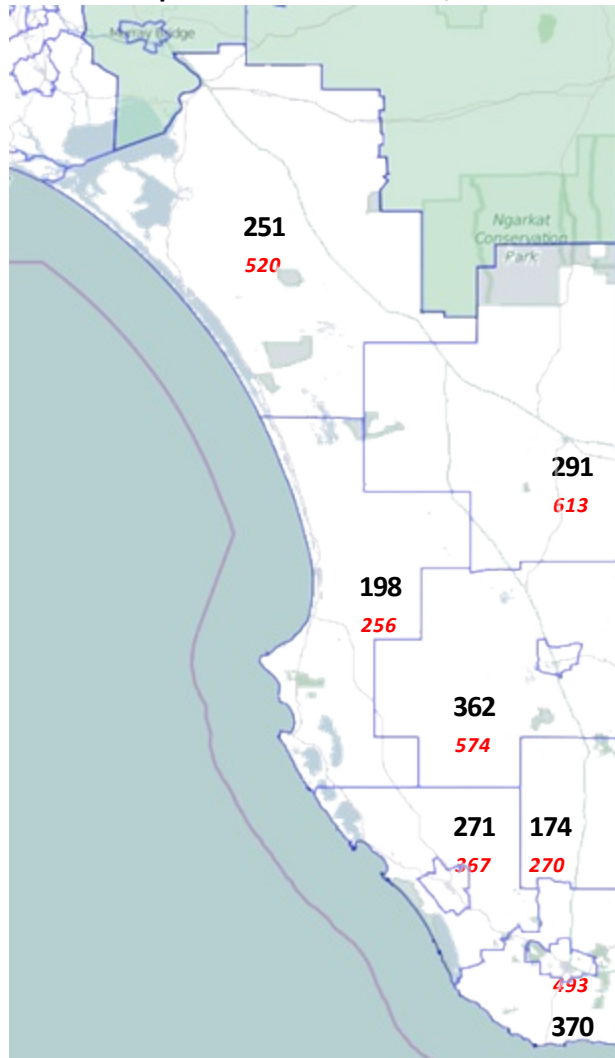
SA	LC Shr
13,349	20%

Aust	LC Shr
128,489	2.1%

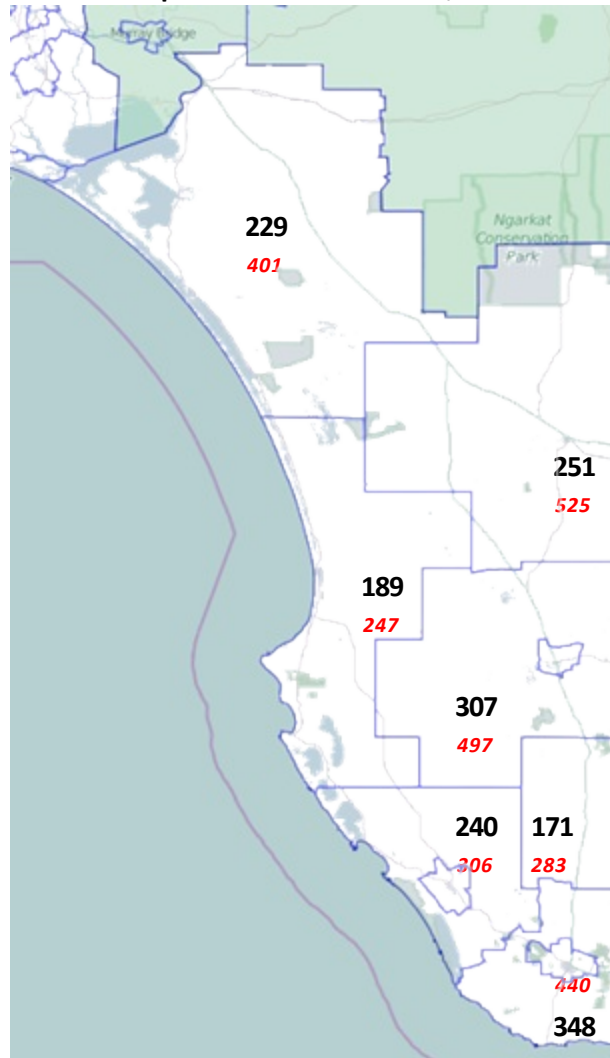
Farm  
consolidation is  
happening

# ABS: Limestone Coast: Cattle Enterprises

**Cattle Enterprises: 2001** 1,917



**Cattle Enterprises: 2013** 1,735



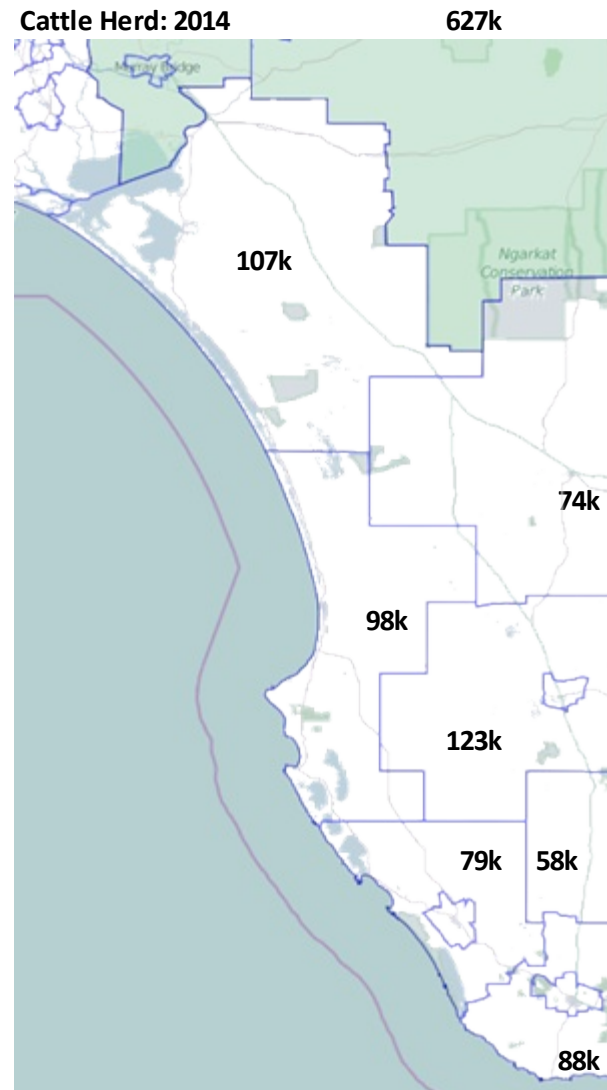
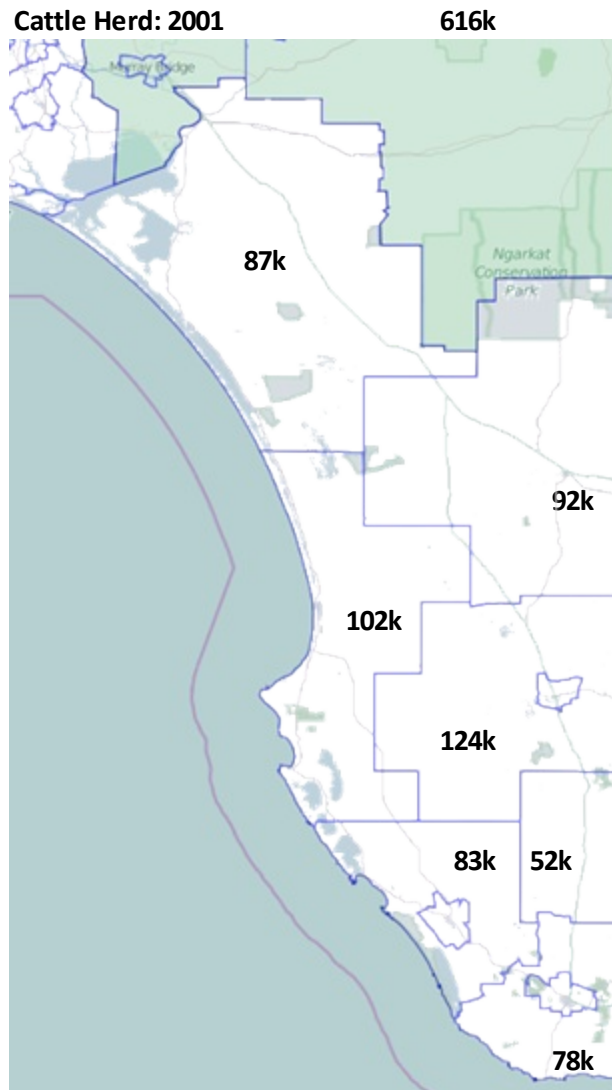
Change	
-182	-9%

SA	LC Shr
4,363	40%

Aust	LC Shr
71,250	2.4%

% of Farms with Cattle	
2001	2013
62%	64%

# ABS: Limestone Coast: Cattle Herd



Change	
11k	2%

SA	LC Shr
1,110k	56%

Aust	LC Shr
26,290k	2.4%

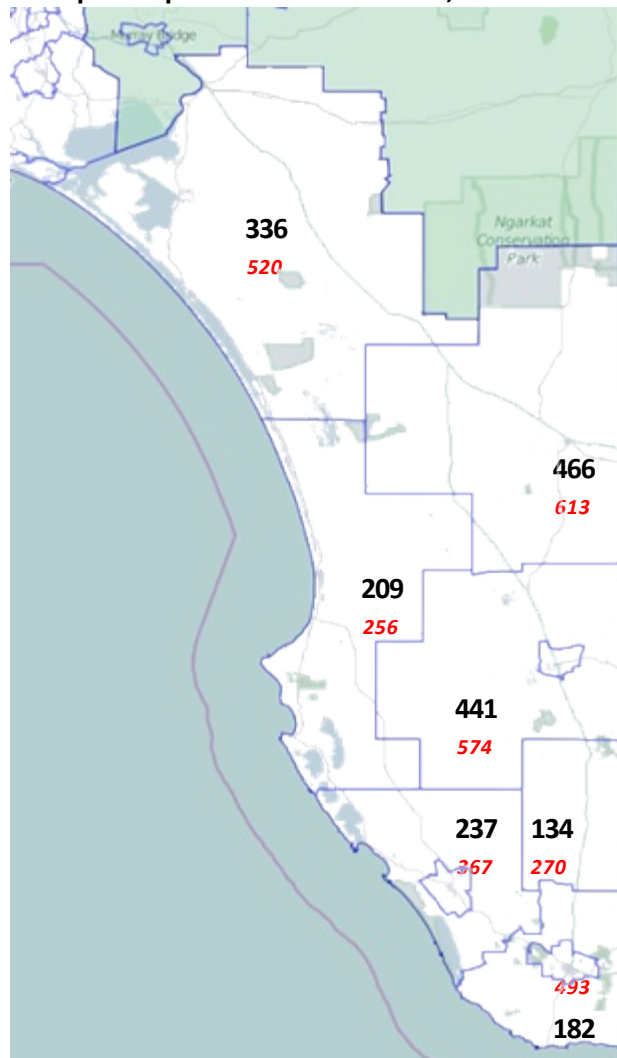
Average Cattle Herd	
2001	2014
321	361

The Limestone Coast region holds 56% of SA herd and 2.4% of the national herd

# ABS: Limestone Coast: Sheep Enterprises

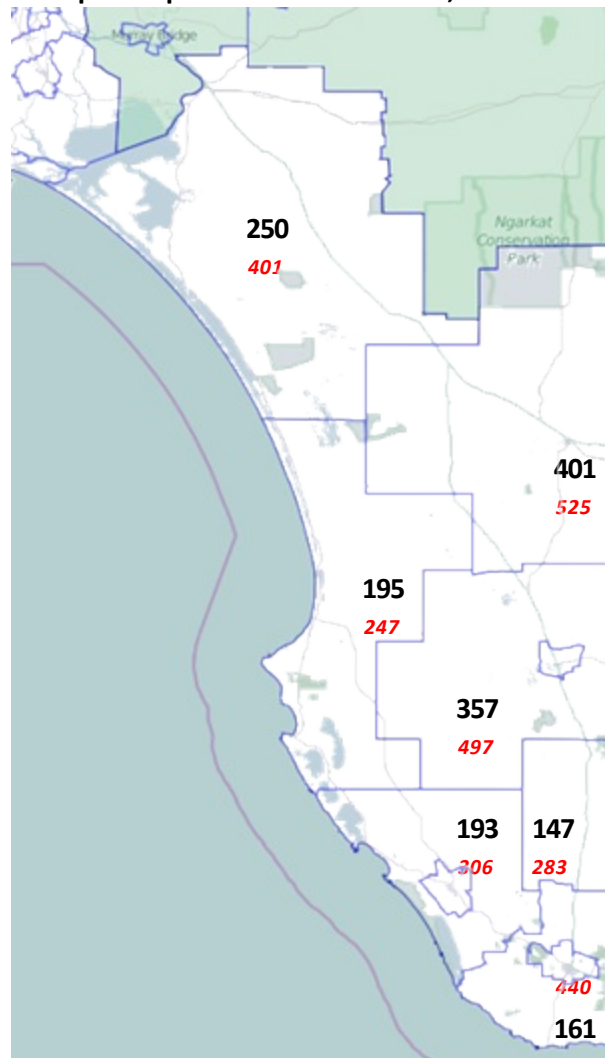
Sheep Enterprises: 2001

2,005



Sheep Enterprises: 2013

1,704



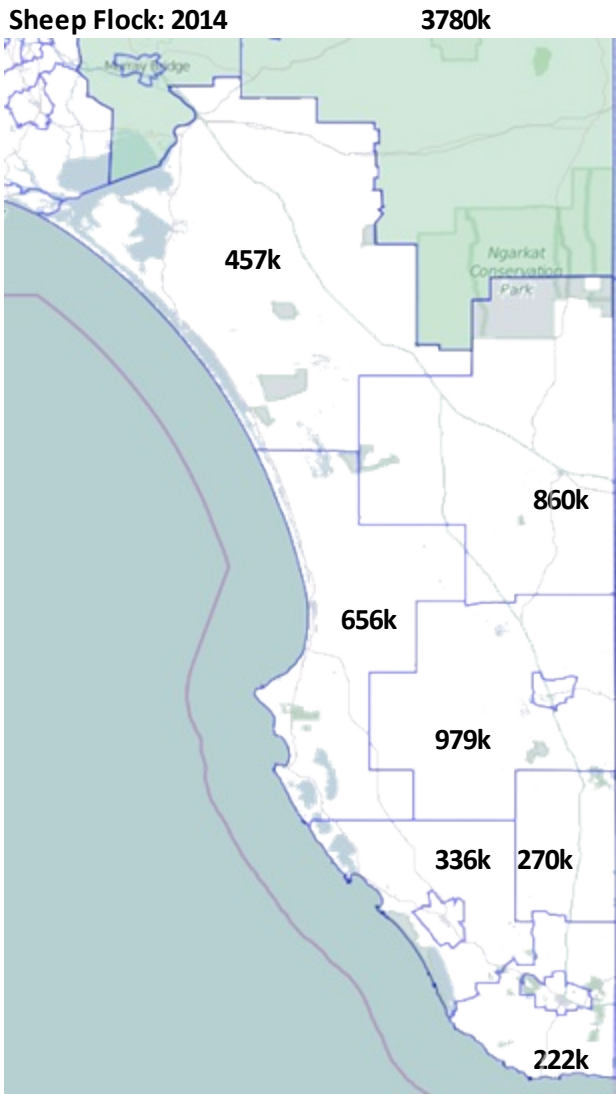
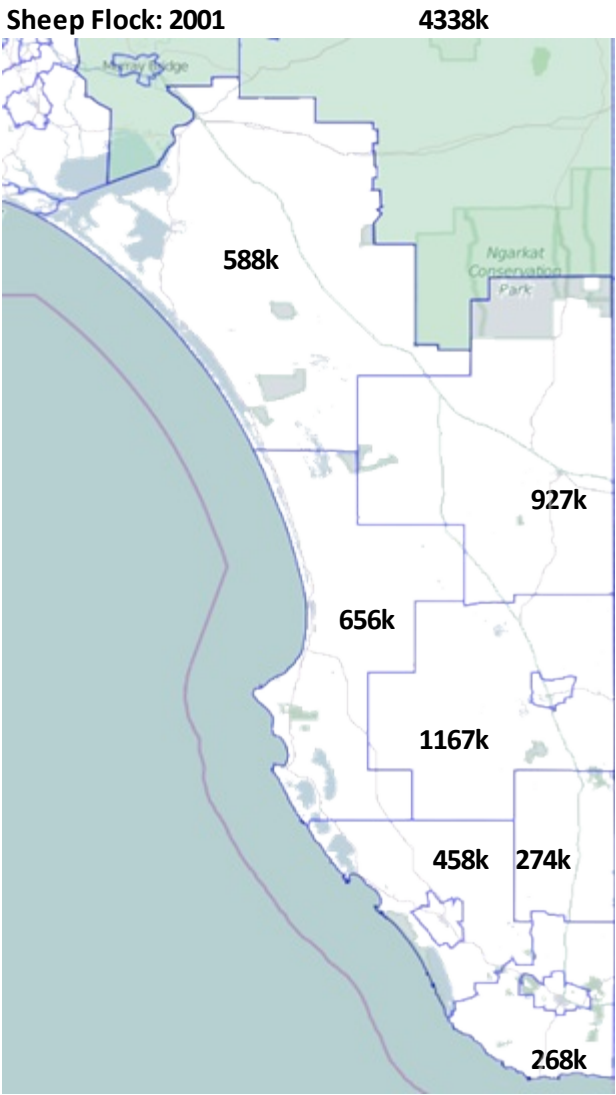
Change	
-301	-15%

SA	LC Shr
6,271	27%

Aust	LC Shr
41,982	4.1%

% of Farms with Sheep	
2001	2013
65%	63%

# ABS: Limestone Coast: Sheep Flock



Change	
-558k	-13%

SA	LC Shr
10,971k	34%

Aust	LC Shr
72,571k	5.2%

Average Flock Size	
2001	2014
2,164	2,218
Change 2.5%	

The Limestone Coast region holds 34% of SA flock and 5.2% of the national flock

Source: ABS Data: Neil Clarke & Associates

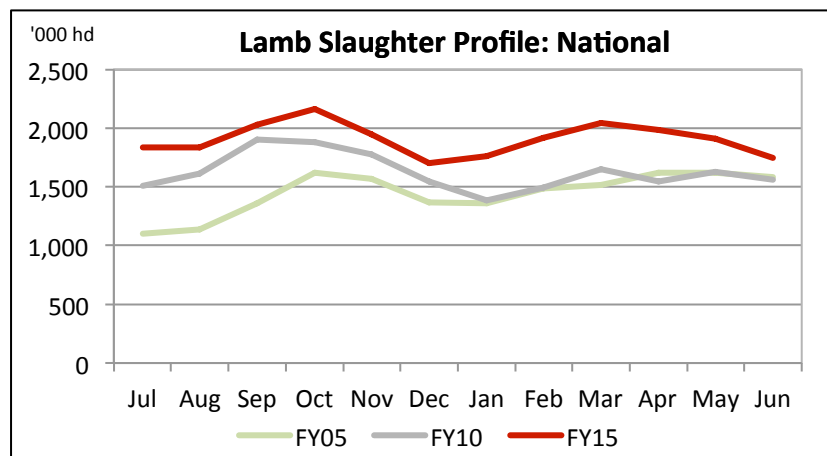
## SA slaughter profile

***According to ABS***

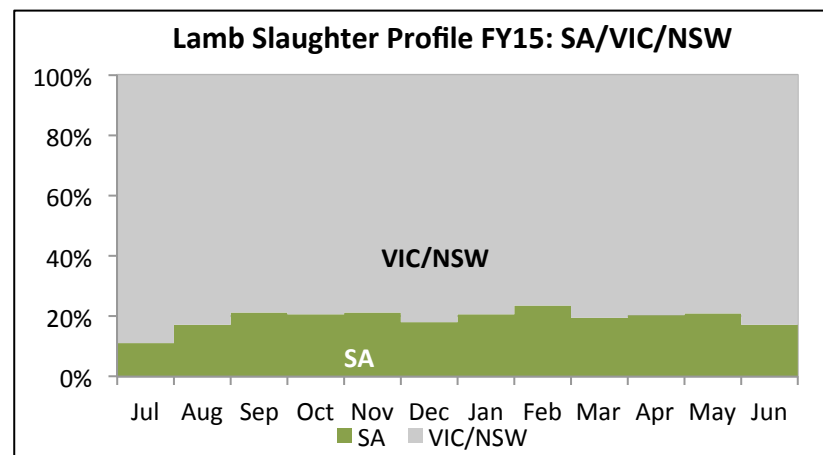
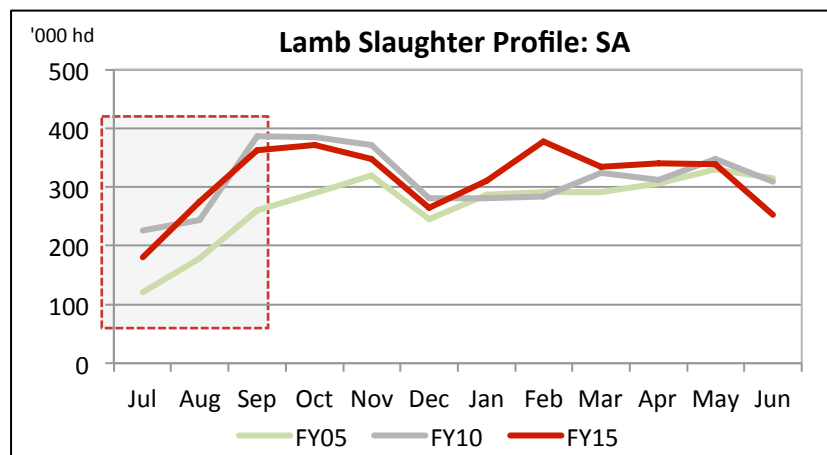
*(based on location of slaughter not source of livestock)*



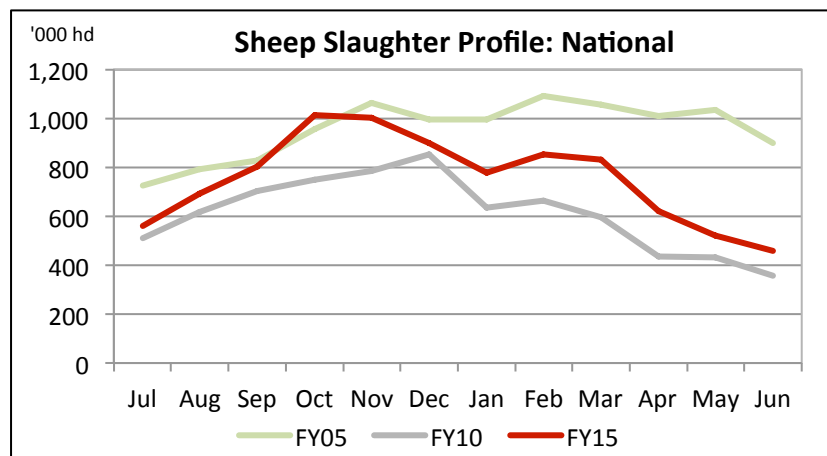
# SA accounts for ~18% of the national lamb kill but reveals a more volatile profile



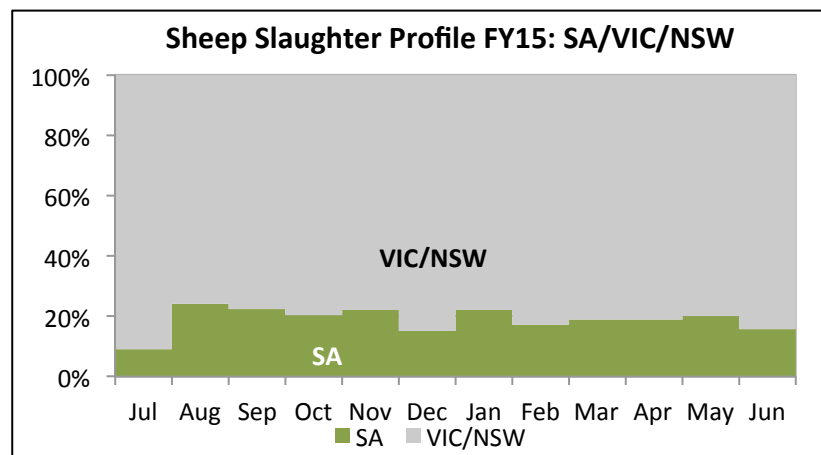
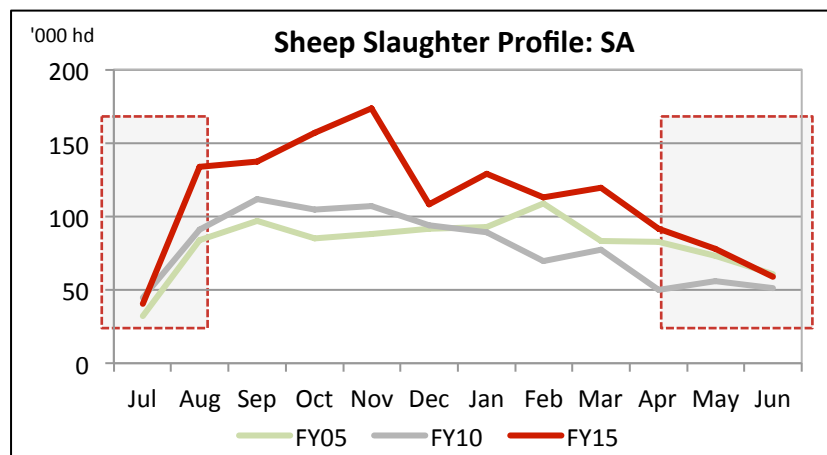
- From FY05-FY15 SA processed 18% of lambs nationally
- The production profile is more volatile than the national profile due to local production characteristics (e.g. July drops to ~13% of national kill)
- More locally, SA represents 21% of combined SA/VIC/NSW lamb production over the same period (avg 15% in July)



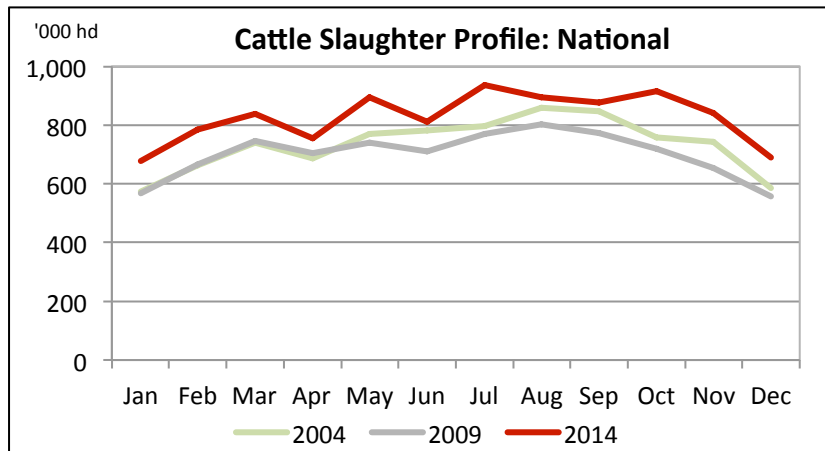
# SA accounts for ~12% of the national sheep kill with similar volatility to lamb production



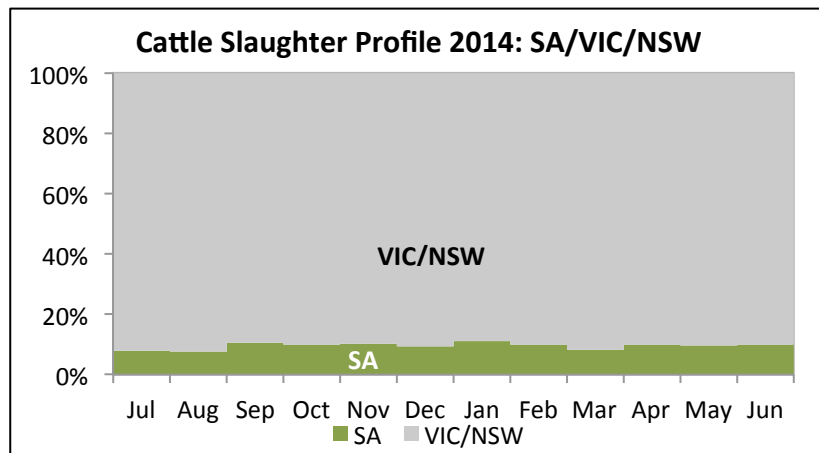
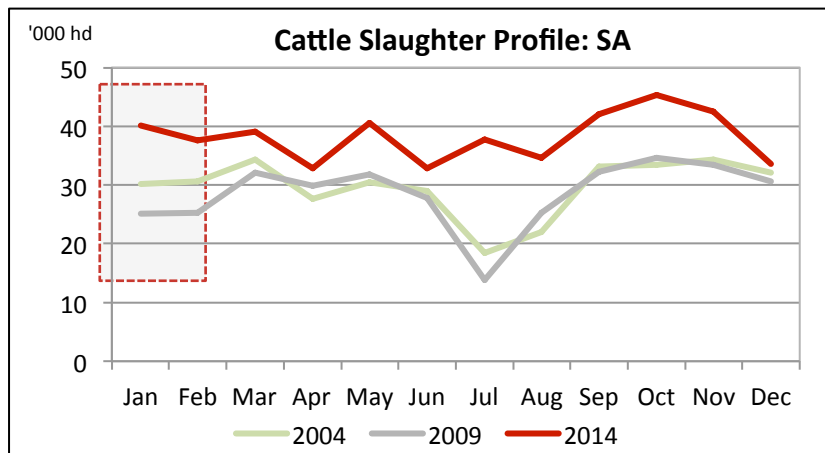
- From FY05-FY15 SA processed 12% of sheep nationally
- The production profile is more volatile than the national profile due to local production characteristics (e.g. July drops to ~9% of national kill)
- More locally, SA represents 17% of combined SA/VIC/NSW sheep production over the same period (avg 11% in July)



# SA accounts for ~4% of the national cattle kill



- From FY05-FY15 SA processed 4% of cattle (for human consumption) nationally
- The production profile has historically shown greater volatility although 2014 flatter
- More locally, SA represents 9% of combined SA/VIC/NSW cattle production over the same period (avg 6% in July)



Source: ABS 7218 – cattle slaughtered for human consumption

# Limestone Coast: Processor profile and position of Limestone Coast production



- The Limestone Coast & Coorong region produces ~1.9m sheep/lambs each year. Whilst they are not all processed within in SA this figure represents 39% of avg sheep/lambs slaughtered each year in SA and ~30% of estimated effective capacity.
- The region produces ~250k slaughter cattle each year. As with sheep/lambs, not all are processed in SA however this figure represents ~60% of cattle slaughtered in SA and ~50% of effective capacity.
- The development of further strategic supply arrangements with local processors could benefit the region's red meat industry.
- There is demand and capacity for the LC region to expand supply, particularly in sheep / lambs

Company	Location	Species	Max hd/day	Est Cap hd/yr
JBS	Bordertown	Shp / Lambs	8,000	2,000,000
TFI	Lobethal	Shp / Lambs	5,000	1,200,000
TFI	Murray Bridge	Shp / Lambs	11,000	2,700,000
TFI	Murray Bridge	Cattle	1,200	180,000
Teys	Naracoorte	Cattle	805	220,000

**region can fill ~30% of effective capacity**

**region can fill ~50%**

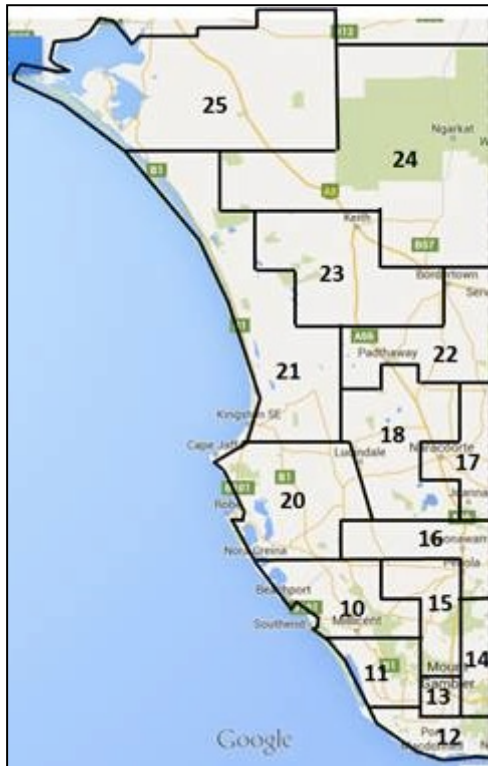
Source: Slaughter numbers based on NLIS data 5 year average to FY15. ABS Slaughter data used to estimate LC&Cg production as % of actual slaughter in SA – period FY11-FY15. Max head capacity from public domain articles. Estimated annual effective capacity based on 90% of max capacity running 46 weeks @ 6 days per week – actual data not available

# Livestock flows into and out of the Limestone Coast (NLIS Data)

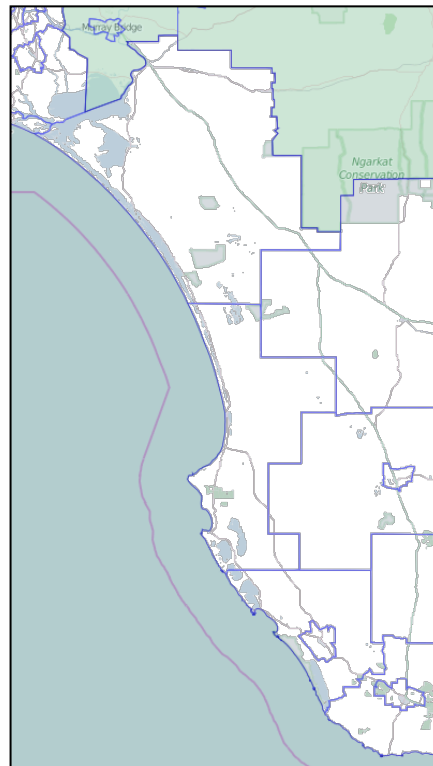
## *1<sup>st</sup> Stage Analysis*

# NLIS has property level data but summarised in regions that differ from ABS and ABARES

NLIS geographies



ABS geographies



We could exactly reconcile the two geometries ...

... but that requires PIC level data to which we could not get access at this point.

As a compromise we have estimated the relationship between the two data sets based on land use related to livestock activities

*The Cluster Group is the first to have access to NLIS data for “commercial” purposes*

# Limestone Coast & Coorong: Total Movements: Cattle

*23% increase in slaughter stock and net exit increase of 29% ...*

*... is this productivity, depletion or switching to other enterprises (or a combination)?*

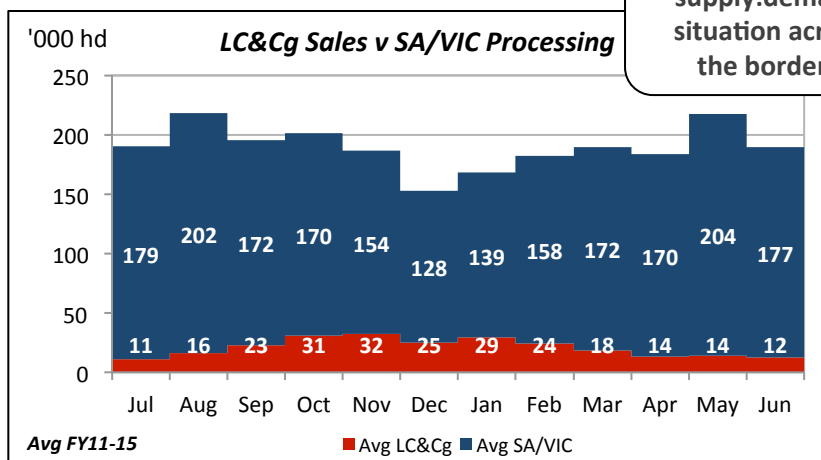
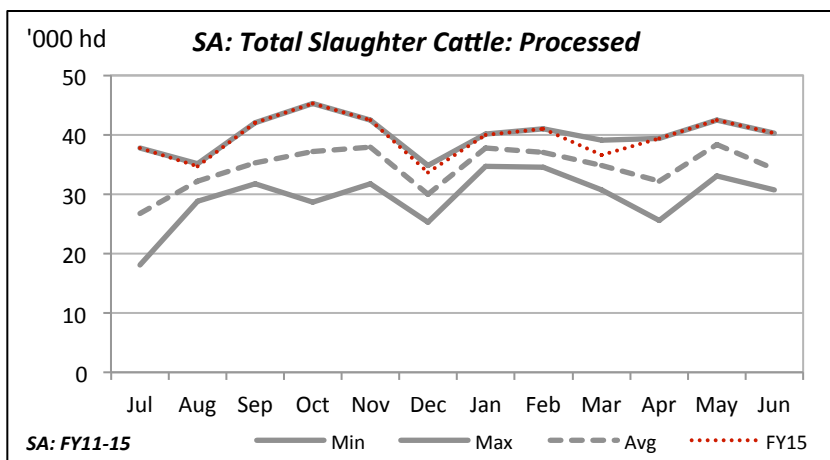
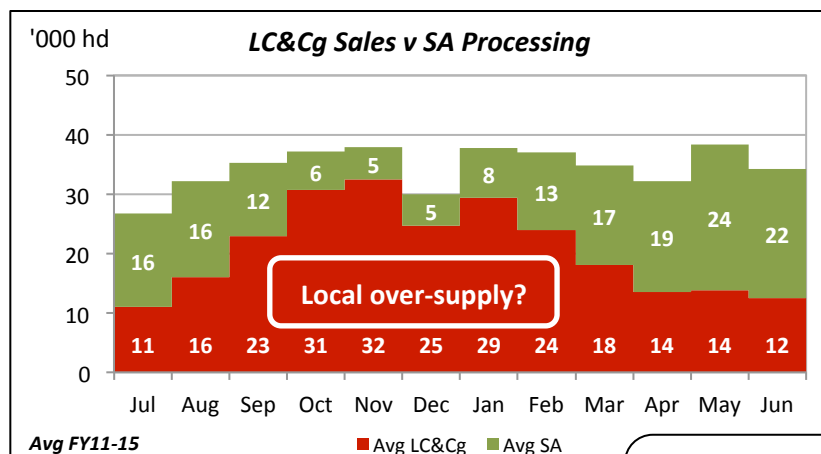
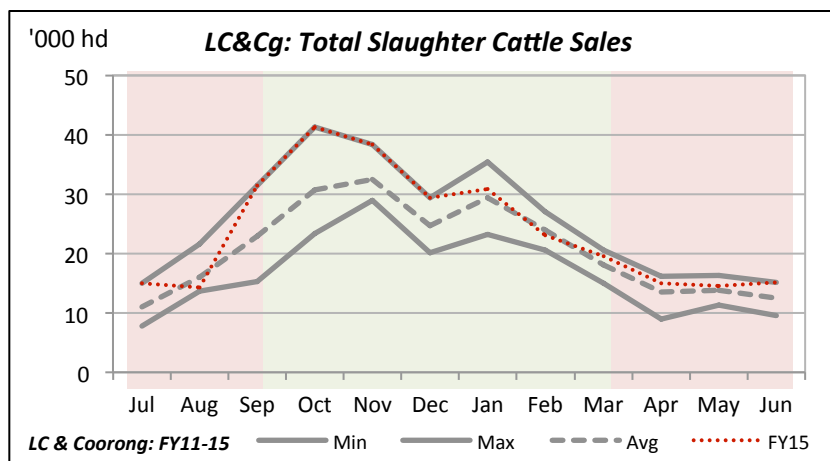
## Reconciliation: LC & Coorong

Flow	Type	Channel	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	2011-15
Zone to Proc	Slaughter	All Channels	233,525	219,381	242,706	260,269	287,941	⇒ 23%
Total Exit from LC	Store	All Channels	121,166	105,984	94,329	103,206	140,186	⇒ 16%
Total Into LC	Store	All Channels	124,567	78,468	97,506	118,563	130,751	⇒ 5%
Net Movements	Store	All Channels	3,401	-27,515	3,177	15,356	-9,435	
All Movements	SI & Str	All Channels	585,134	488,489	517,319	579,023	653,330	⇒ 12%
Net Movements	SI & Str	All Channels	-230,124	-246,896	-239,529	-244,913	-297,376	⇒ 29%
Internal Store Movements: to & from			105,876	84,656	82,778	96,984	94,451	
Slaughter Movements: % Direct			45%	55%	64%	64%	62%	
Internal Store Movements: % Direct			60%	57%	56%	56%	67%	
External Store Movements: % Direct			64%	58%	63%	62%	62%	

- Direct slaughter sales increase from 45% to 62% share with a holding pattern in recent years possibly driven by price and season*
- Internal movements of average 93k head (within the region) account for 14% of total movements*

# Limestone Coast & Coorong: Slaughter Cattle: Production/Sales v Processing Profiles

*Can we use this data to influence marketing strategies? – identifying key supply:demand points*



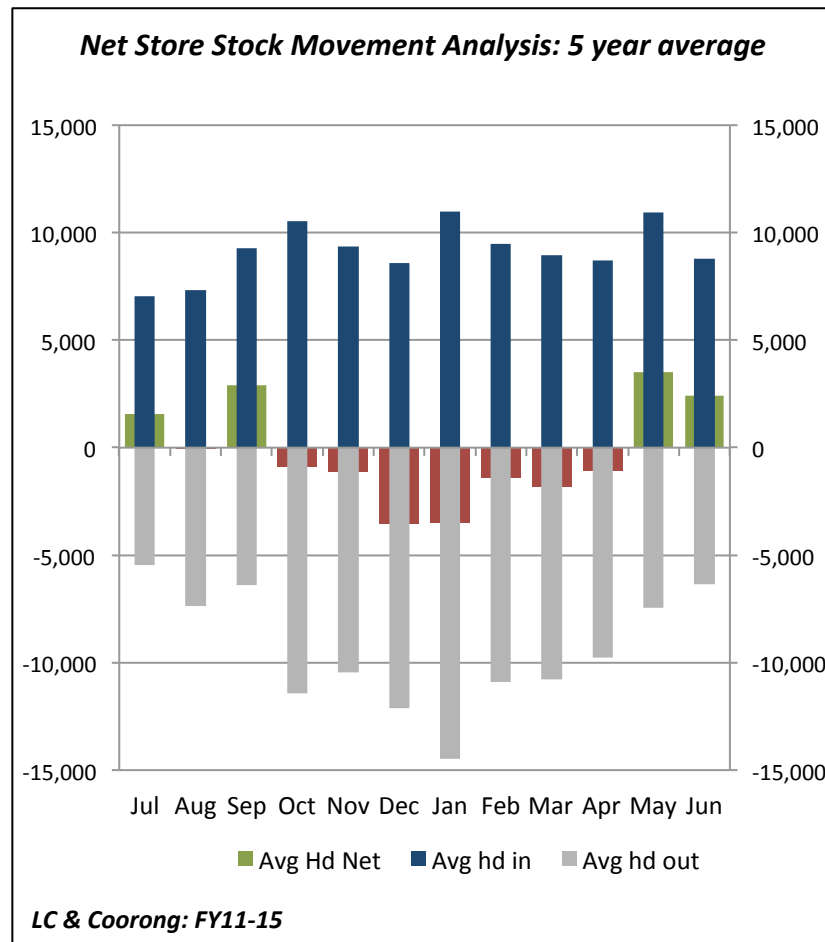
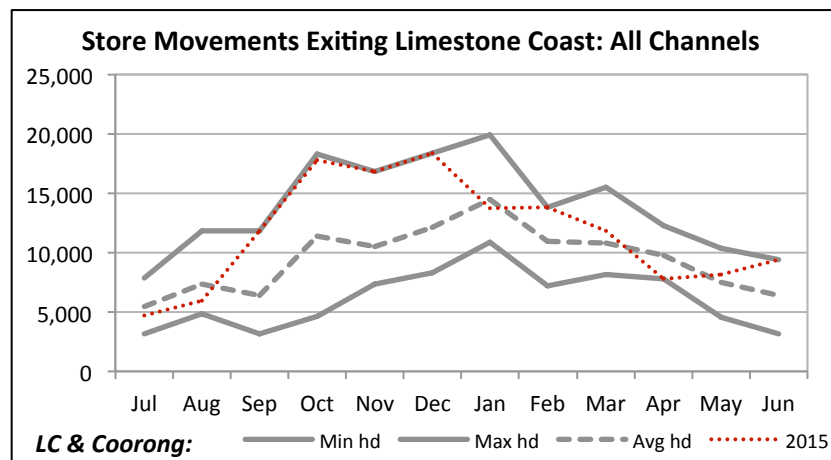
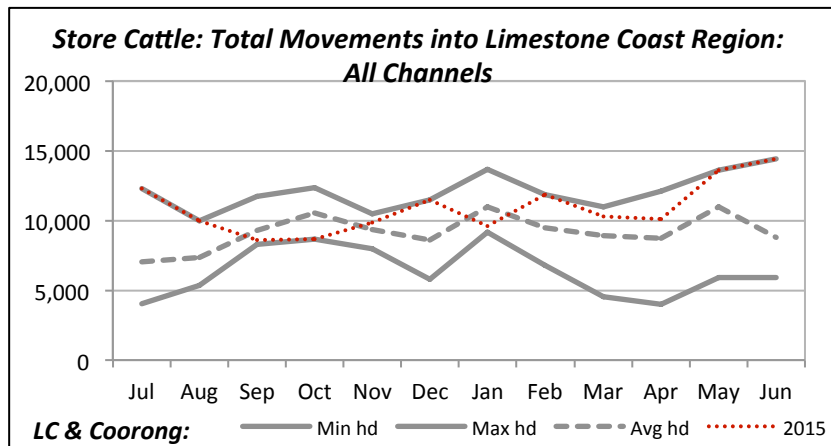
What is the supply:demand situation across the border?

***Using the national NLIS dataset we would understand these dynamics far better***



# Limestone Coast & Coorong: Net Movements: Store Cattle

*What insights for performance improvements can we draw from a better understanding of store movements into and out of the region?*



# Limestone Coast & Coorong: Internal Movements: Store Cattle – Direct from Property: FY11

*Flow matrix of direct movements between NLIS zones within the South East Region*

DIRECT	To ➡																
From➡	SA10	SA11	SA12	SA13	SA14	SA15	SA16	SA17	SA18	SA20	SA21	SA22	SA23	SA24	SA25	SA28	Total
SA10	399	25	0	3	25	223	270	0	45	239	272	27	0	0	958	0	2,486
SA11	292	322	41	19	73	105	0	11	177	146	0	0	74	0	4	0	1,264
SA12	11	225	653	209	150	41	42	0	109	0	0	0	700	0	0	0	2,140
SA13	48	128	128	567	147	152	16	0	11	0	27	0	0	10	15	0	1,249
SA14	0	11	65	95	115	106	30	5	22	80	25	1	0	0	0	0	555
SA15	168	422	4	199	66	525	121	33	84	79	0	0	0	0	89	0	1,790
SA16	182	1	109	113	31	69	381	27	623	65	3	0	1	0	143	0	1,748
SA17	26	28	38	42	0	12	53	194	360	461	2	39	30	0	293	0	1,578
SA18	16	4	5	44	172	20	1,228	448	1,300	936	86	46	11	292	2,234	0	6,842
SA20	1,517	29	125	3	68	152	241	360	1,742	3,695	118	10	106	87	2,005	0	10,258
SA21	40	119	0	26	0	35	0	350	386	840	718	291	353	220	2,253	0	5,631
SA22	106	3	2	66	3	275	102	159	21	121	62	153	632	95	1,091	1	2,892
SA23	59	649	145	113	6	123	128	23	44	133	388	2,252	1,030	760	4,439	0	10,292
SA24	10	2	0	2	8	7	60	33	399	8	142	104	226	563	5,344	44	6,952
SA25	194	7	135	153	0	147	39	152	246	60	372	10	159	627	7,978	361	10,640
SA28	0	33	0	3	0	0	0	0	10	0	0	0	1	17	162	1	227
Total	3,068	2,008	1,450	1,657	864	1,992	2,711	1,795	5,579	6,863	2,215	2,933	3,323	2,671	27,008	407	66,544
Net	582	744	-690	408	309	202	963	217	-1,263	-3,395	-3,416	41	-6,969	-4,281	16,368	180	0

*19k or 28% of cattle movements were within the actual NLIS Zone (ie SA10 to SA10)  
although not all are sales*

# Limestone Coast & Coorong: Internal Movements: Store Cattle – via Saleyard: FY11

*Flow matrix of saleyard movements between NLIS zones within the South East Region*

**SALEYARD To ➡**

From ➡	SA10	SA11	SA12	SA13	SA14	SA15	SA16	SA17	SA18	SA20	SA21	SA22	SA23	SA24	SA25	SA28	Total
SA10	634	111	103	134	150	224	111	48	240	100	26	22	134	244	249	0	2,530
SA11	352	109	166	358	151	108	147	1	157	38	21	0	0	168	155	0	1,931
SA12	96	197	264	562	256	444	259	23	404	31	39	25	12	97	132	0	2,841
SA13	145	90	44	279	104	247	75	6	339	38	1	2	0	39	72	0	1,481
SA14	73	75	201	201	249	261	107	22	213	45	66	1	0	73	138	0	1,725
SA15	160	87	110	261	130	243	144	11	462	11	28	4	29	90	173	0	1,943
SA16	73	57	240	79	39	689	378	49	426	180	47	111	113	133	178	0	2,792
SA17	60	19	25	17	24	66	121	144	393	21	0	193	50	68	409	0	1,610
SA18	480	312	205	404	268	725	505	579	1,109	380	207	486	218	259	868	0	7,005
SA20	482	179	402	401	290	726	355	204	538	210	59	268	193	318	664	0	5,289
SA21	388	176	80	267	138	581	317	291	289	80	6	302	148	140	494	4	3,701
SA22	58	12	87	135	102	279	224	179	435	79	28	230	13	112	278	25	2,276
SA23	66	61	28	100	76	223	261	191	415	140	52	333	221	161	349	0	2,677
SA24	114	33	116	166	276	219	309	59	415	98	70	340	121	181	290	0	2,807
SA25	85	11	41	9	9	24	105	169	318	78	45	209	185	254	459	16	2,017
SA28	42	38	45	43	32	43	0	0	4	0	1	1	9	50	138	99	545
<b>Total</b>	<b>3,308</b>	<b>1,567</b>	<b>2,157</b>	<b>3,416</b>	<b>2,294</b>	<b>5,102</b>	<b>3,418</b>	<b>1,976</b>	<b>6,157</b>	<b>1,529</b>	<b>696</b>	<b>2,527</b>	<b>1,446</b>	<b>2,387</b>	<b>5,046</b>	<b>144</b>	<b>43,170</b>
<b>Net</b>	<b>778</b>	<b>-364</b>	<b>-684</b>	<b>1,935</b>	<b>569</b>	<b>3,159</b>	<b>626</b>	<b>366</b>	<b>-848</b>	<b>-3,760</b>	<b>-3,005</b>	<b>251</b>	<b>-1,231</b>	<b>-420</b>	<b>3,029</b>	<b>-401</b>	<b>0</b>

*5k or 11% of cattle movements were within the actual NLIS Zone (ie SA10 to SA10)  
and all were sales*

# Limestone Coast: Livestock Movements: Internal Cattle Movements – via Saleyard

## *Within Limestone Coast Region: Via Saleyard*

Month	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
SA10	2,530	2,454	2,510	2,826	2,227
SA11	1,931	1,851	1,485	1,791	1,225
SA12	2,841	2,624	3,248	3,139	2,457
SA13	1,481	1,429	1,866	1,974	1,455
SA14	1,725	1,974	2,527	2,308	2,218
SA15	1,943	2,305	2,407	2,815	2,186
SA16	2,792	2,421	2,029	2,685	2,597
SA17	1,610	1,761	1,471	2,231	1,500
SA18	7,005	4,712	5,078	6,090	3,741
SA20	5,289	4,575	4,051	4,616	2,989
SA21	3,701	2,751	2,712	3,296	1,982
SA22	2,276	2,099	1,534	2,160	1,927
SA23	2,677	2,384	2,424	1,905	1,545
SA24	2,807	2,266	2,522	2,755	2,032
SA25	2,017	1,633	1,557	3,159	1,551
SA28	545	398	197	255	188
Total	43,170	37,637	37,618	44,005	31,820

- Could the double handling be reduced to:

- Reduce transaction costs
- Increase returns

Further analysis can identify average lot sizes, transportation costs & pty-pty versus pty-SY-pty distances travelled

# Limestone Coast & Coorong: Total Movements: Sheep & Lambs

*18% increase in slaughter stock and net exit increase of 23% ...*

*... is this productivity, depletion or switching to other enterprises (or a combination)?*

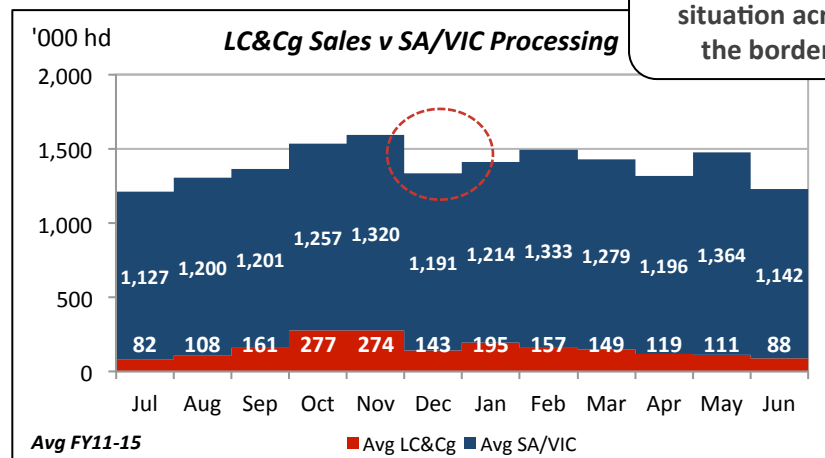
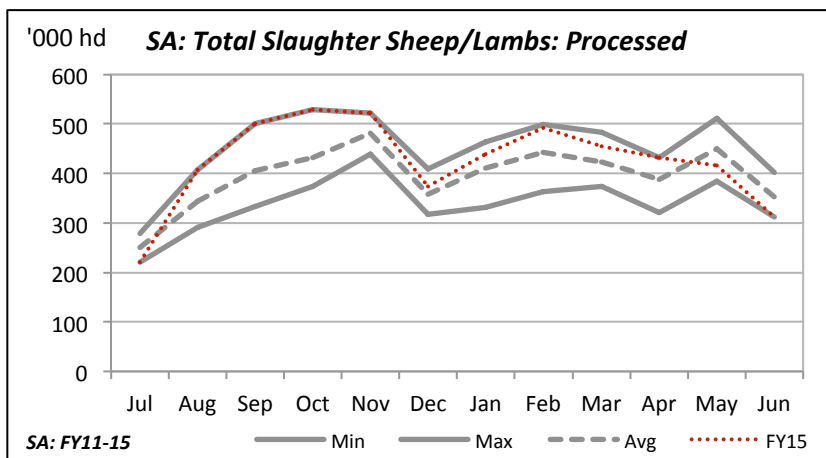
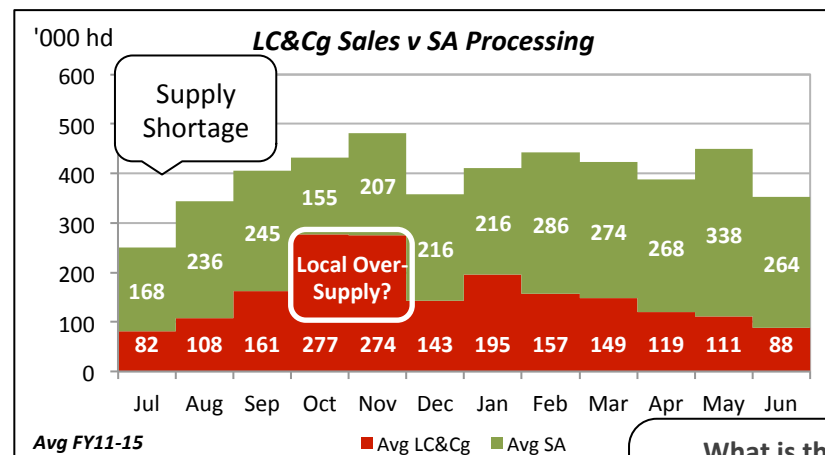
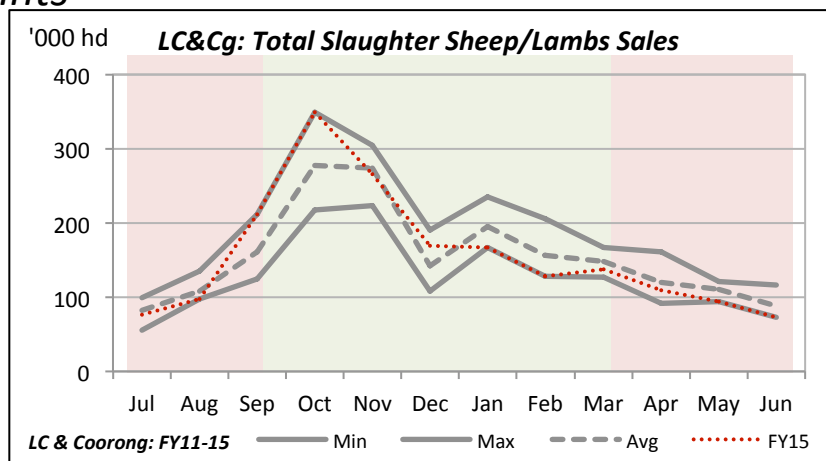
## Reconciliation: LC & Coorong

Flow	Type	Channel	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	2011-15
Zone to Proc	Slaughter	All Channels	1,594,610	1,797,869	2,030,451	2,021,921	1,877,277	⇒ 18%
Total Exit from LC	Store	All Channels	71,813	134,558	93,457	137,336	179,357	⇒ 150%
Total Into LC	Store	All Channels	150,840	136,974	170,722	202,397	197,716	⇒ 31%
Net Movements	Store	All Channels	79,027	2,416	77,265	65,061	18,360	
All Movements	SI & Str	All Channels	1,918,418	2,219,664	2,434,124	2,557,205	2,477,383	⇒ 29%
Net Movements	SI & Str	All Channels	-1,515,584	-1,795,453	-1,953,186	-1,956,860	-1,858,917	⇒ 23%
Internal Store Movements: to & from			101,154	150,263	139,493	195,551	223,033	
Slaughter Movements: % Direct			65%	77%	80%	79%	81%	
Internal Store Movements: % Direct			32%	47%	37%	50%	61%	
External Store Movements: % Direct			38%	52%	35%	48%	53%	

- Direct slaughter sales increase from 65% to 81% share. Store sales increasing traded off paddock rather than saleyard.*
- Internal store movements of average 161k head (within the region) account for 7% of total movements*

# Limestone Coast & Coorong: Sheep&Lambs: Production/Sales v Processing Profiles

*Can we use this data to influence marketing strategies? – identifying key supply:demand points*

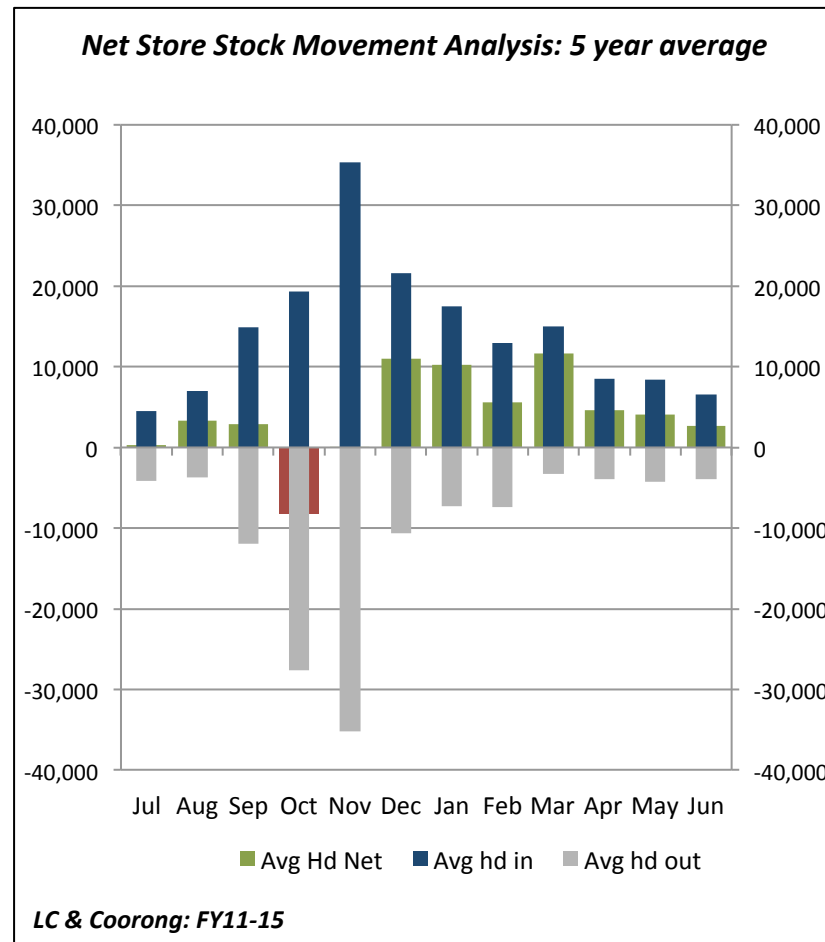
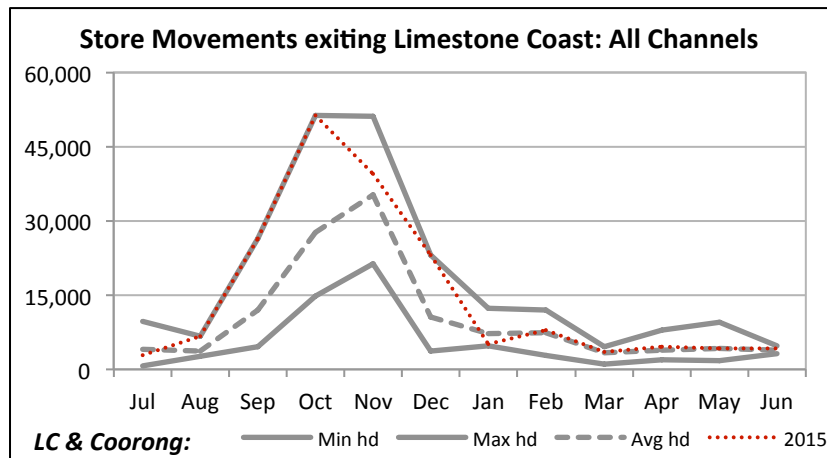
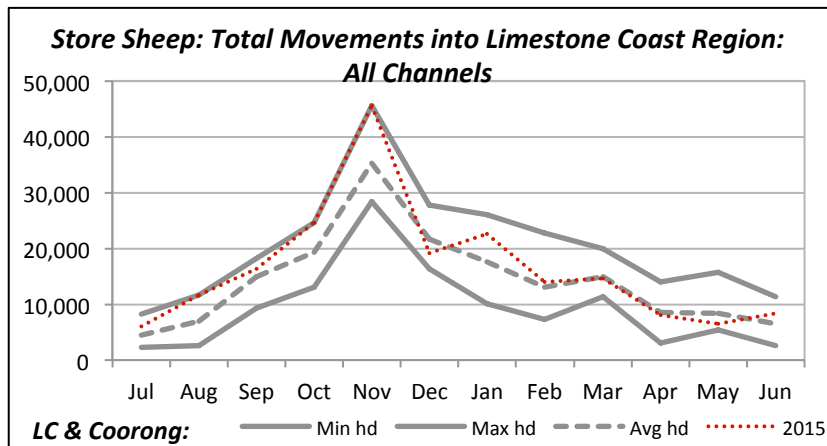


What is the supply:demand situation across the border?

**Using the national NLIS dataset we would understand these dynamics far better**

# Limestone Coast & Coorong: Net Movements: Store Sheep

*What insights for performance improvements can we draw from a better understanding of store movements into and out of the region?*



# Limestone Coast: Livestock Movements: Cattle movement trends across zones

**Zone to Processor: All Channels**

Month	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
SA10	18,262	17,697	16,765	18,387	19,760
SA11	10,946	8,982	9,251	12,482	13,912
SA12	18,859	16,224	18,787	19,676	19,806
SA13	8,029	8,948	13,698	10,570	14,020
SA14	8,593	8,041	8,277	10,088	11,639
SA15	16,719	17,825	18,954	18,118	18,097
SA16	11,745	9,941	10,471	11,312	13,026
SA17	6,666	6,050	5,669	6,694	6,160
SA18	20,158	16,397	16,227	17,830	16,419
SA20	18,933	18,230	17,716	16,767	18,241
SA21	12,220	10,090	11,438	11,425	12,610
SA22	11,507	8,905	9,397	10,954	10,988
SA23	14,261	13,668	18,542	23,498	22,884
SA24	14,062	14,171	17,733	16,892	17,790
SA25	50,601	52,496	59,519	65,694	84,951
SA28	1,196	1,132	1,137	1,809	2,188
Total	242,757	228,797	253,581	272,196	302,491
LC Only	177,957	162,766	177,519	189,038	198,976
LC & Coorong	233,525	219,381	242,706	260,269	287,941

**Net Store Movements: Store Only for Limestone Coast**

Month	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
SA10	-3,244	-3,277	-1,971	-557	-5,131
SA11	-605	-2,215	-1,314	1,762	-696
SA12	-1,207	144	-2,344	532	-3,937
SA13	7,083	8,812	10,357	12,077	14,986
SA14	-20	-2,550	-311	1,634	-1,337
SA15	-2,679	-63	838	1,490	72
SA16	-2,195	-3,043	-998	-1,702	-4,210
SA17	-467	-1,499	190	-233	-2,363
SA18	6,235	-8,959	-847	-1,147	-9,381
SA20	-6,636	-8,780	-6,777	-8,768	-12,240
SA21	-503	-6,613	-5,279	-4,518	-7,183
SA22	-2,719	-4,417	-1,954	-3,851	-5,005
SA23	-11,862	-13,088	-11,942	-14,994	-18,359
SA24	5,100	1,145	2,358	2,193	-4,017
SA25	20,300	19,387	26,606	35,898	54,691
SA28	234	-454	-17	-62	310
Total	6,815	-25,470	6,595	19,754	-3,800
LC Only	-14,663	-41,368	-18,144	-13,910	-52,044
LC & Coorong	3,401	-27,515	3,177	15,356	-9,435

- The production patterns vary across the region
- Understanding the differences in patterns provides insight for collective action / response
- How can NLIS data assist in understanding these production profile differences?

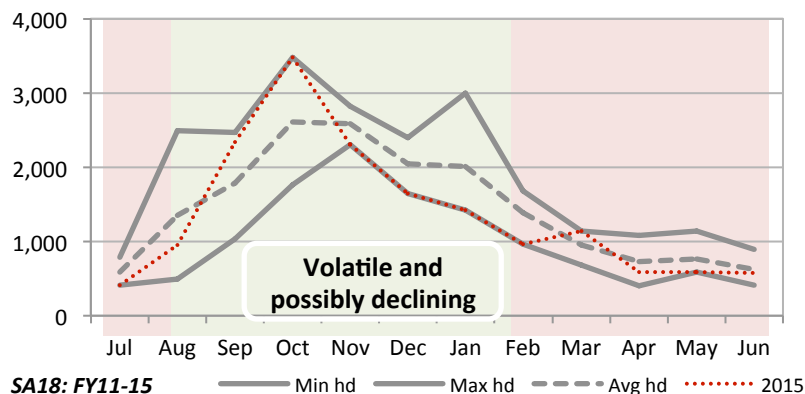


# Limestone Coast ZONE 18 v Zone 25 Cattle: Slaughter & Store Movements

*NLIS data allows us to analyse the variances across zones driven by season, proximity to infrastructure, other factors*

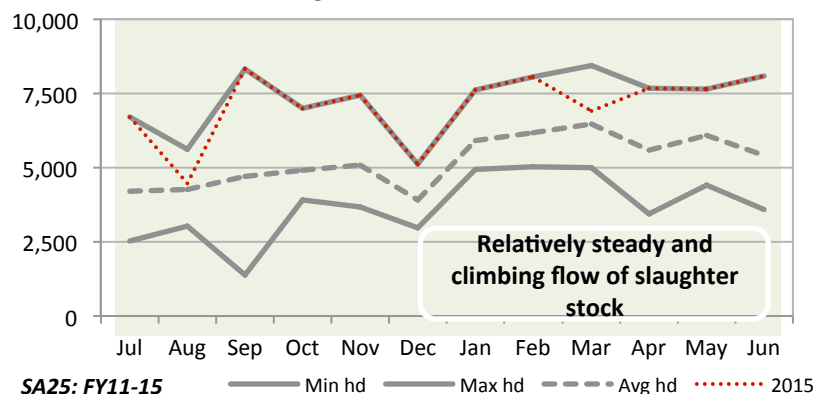
Zone 18

Total Slaughter Cattle: All Channels

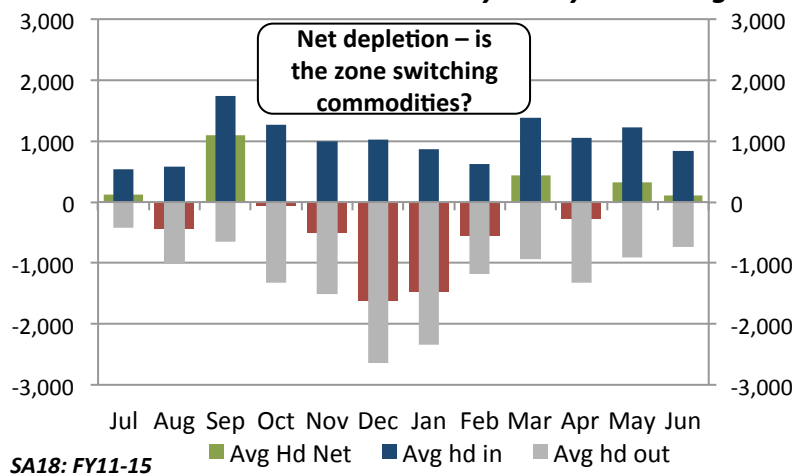


Zone 25

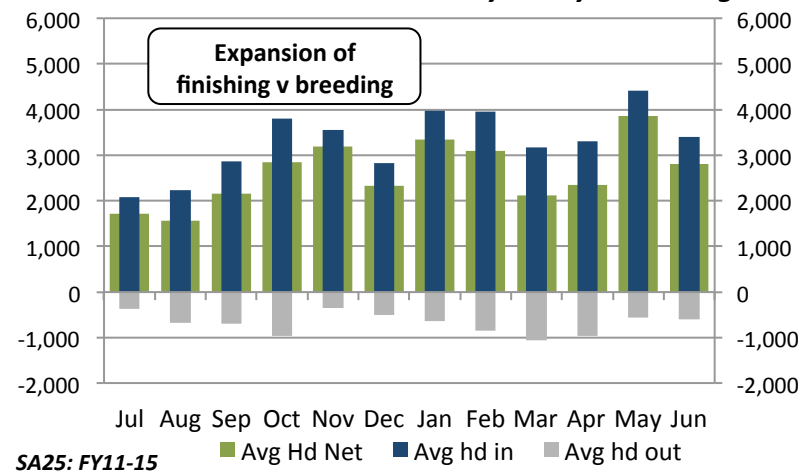
Total Slaughter Cattle: All Channels



Net Store Stock Movement Analysis: 5 year average



Net Store Stock Movement Analysis: 5 year average



# Limestone Coast: Livestock Movements: Sheep & lamb movement trends across zones

**Zone to Processor Movements: All Channels**

Month	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
SA10	162,178	175,179	181,465	180,227	180,480
SA11	55,568	47,477	65,869	56,651	51,459
SA12	37,936	34,106	37,690	38,436	39,910
SA13	22,087	26,936	23,991	16,122	17,463
SA14	52,118	42,018	45,641	50,817	48,987
SA15	96,245	103,702	116,422	115,888	114,898
SA16	95,451	88,489	111,352	117,344	105,436
SA17	188,454	224,073	220,678	248,135	201,490
SA18	190,518	208,095	274,630	271,199	212,679
SA20	159,656	173,921	196,994	234,503	236,868
SA21	71,834	134,642	94,209	87,693	98,272
SA22	118,950	112,436	163,509	149,498	121,519
SA23	120,540	163,010	205,676	167,779	159,459
SA24	133,716	174,425	173,062	179,859	177,664
SA25	109,515	115,836	146,527	132,064	134,265
SA28	73,304	81,843	92,141	103,321	105,710
Total	1,688,070	1,906,188	2,149,856	2,149,536	2,006,559
LC Only	1,395,729	1,553,772	1,761,989	1,768,435	1,620,402
LC & Coorong	1,594,610	1,797,869	2,030,451	2,021,921	1,877,277

**Net Store Movements: Store Only for Limestone Coast**

Month	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
SA10	17,678	11,018	16,116	13,304	8,062
SA11	-1,308	-149	2,090	2,581	2,410
SA12	-933	6,461	989	3,013	1,703
SA13	-748	-396	1,263	-230	-516
SA14	211	-1,029	-410	1,365	13
SA15	551	7,415	6,673	7,950	1,152
SA16	6,846	10,766	7,851	19,618	12,935
SA17	14,143	4,990	16,172	10,248	18,556
SA18	12,586	-1,783	-1,520	3,932	227
SA20	-534	1,196	7,396	953	-23,215
SA21	-2,000	-2,580	-1,758	-13,559	-11,711
SA22	5,144	-4,903	4,946	14,385	13,836
SA23	2,337	-28,980	-6,195	-7,061	-10,822
SA24	3,368	3,913	3,447	155	-1,777
SA25	27,720	-1,283	24,949	12,580	9,975
SA28	-9,790	-7,069	-5,539	-11,675	-7,182
Total	75,271	-2,413	76,470	57,559	13,646
LC Only	55,710	8,654	56,543	61,239	16,531
LC & Coorong	79,027	2,416	77,265	65,061	18,360

- *The production patterns vary across the region*
- *Understanding the differences in patterns provides insight for collective action / response*

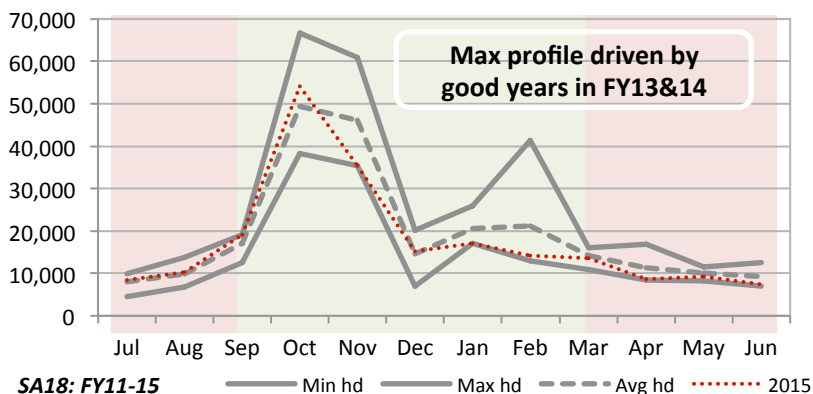
# Limestone Coast ZONE 18 v Zone 25

## Sheep & Lambs: Slaughter & Store Movements

*NLIS data allows us to analyse the variances across zones driven by season, proximity to infrastructure, other factors*

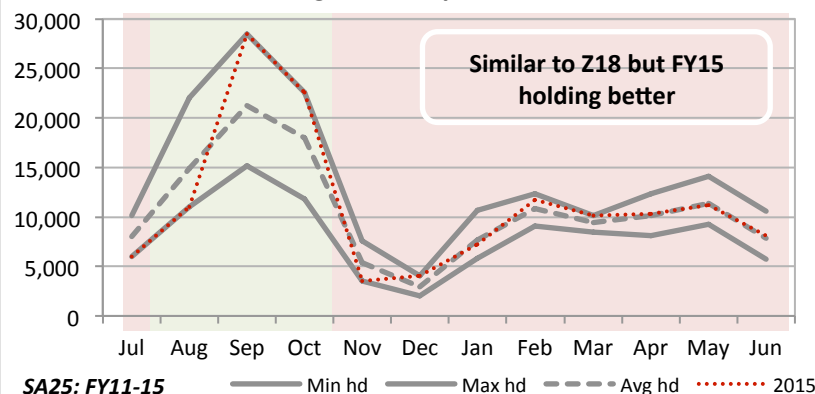
**Zone 18**

**Total Slaughter Sheep: All Channels**

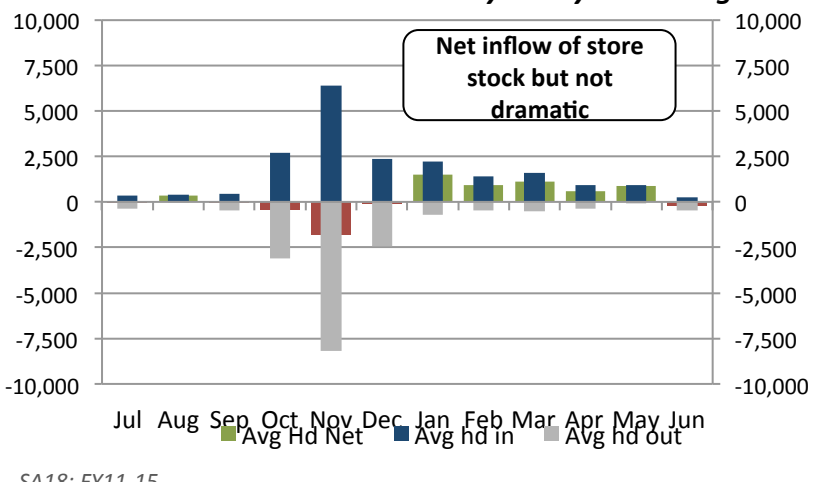


**Zone 25**

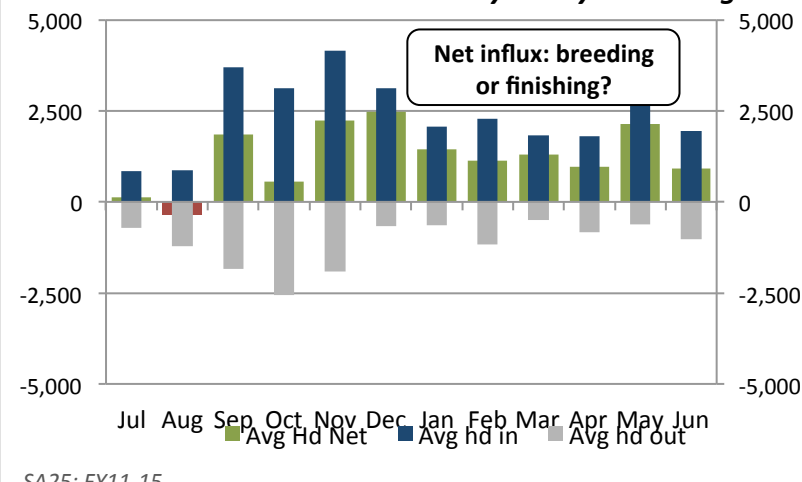
**Total Slaughter Sheep: All Channels**



**Net Store Stock Movement Analysis: 5 year average**



**Net Store Stock Movement Analysis: 5 year average**

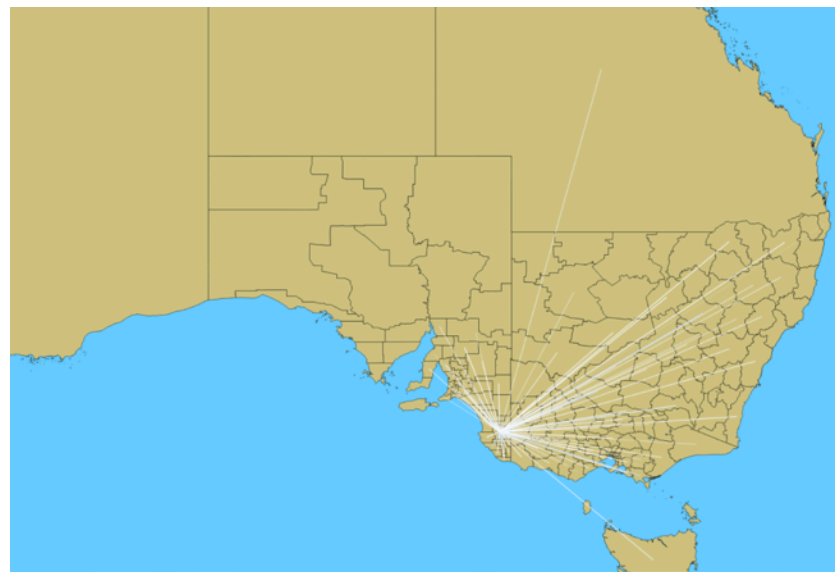


# Limestone Coast: NLIS Livestock Movements: Flow Mapping

*Store cattle moved off property from Zone 18*



*Store cattle moved via saleyard from Zone 18*



- We can identify the time, seasonal factors, distances travelled and average number of head transported with each of these movements?
- Can we gain insight as to whether the optimal target markets have been achieved for the livestock?
- Can collective planning / marketing improve effectiveness or lower cost of livestock movements?

# Limestone Coast: NLIS Livestock Movements: The Opportunity

- The NLIS system provides whole of life traceability from property to property to feedlot to abattoir or to boat whether direct from property or via a saleyard
- It is the most reliable tool for understanding production patterns and logistics costs
- It can be used for:
  - understanding livestock flows as a function of season and market conditions
  - analysing optimal placement and capacity of infrastructure
  - production forecasting
  - developing collective marketing and logistics plans
- Combined with pricing (e.g. NLRs) and performance (e.g. LDL) data it will provide the basis for a highly strategic benchmarking and performance improvement platform
- First stage handlers and processors have this data at a consolidated level but producers rarely have this detail and even less frequently pool or share it
- The analysis contained in this report has barely scratched the surface of its potential benefit to livestock industry participants
- The Limestone Coast Red Meat Cluster is the first entity to have access to this data and continued and expanded access is recommended

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