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ANNEXURES

ANNEXURE I

Table A1: Overview of South Africa's productive structure in the agricultural product space

Cluster	HS code	Product name	RTA	South Africa's average export value in USD (2009-2011)	Share of product in global agricultural trade (2007 - 2011)	Number of linkages in the product space	Average proximity of linkages
Primary agriculture	080610	Grapes, fresh	12.1	402 046	0.27%	2	0.60
	080810	Apples, fresh	7.3	256 888	0.31%	3	0.58
	510111	Wool, not carded/combed, greasy, incl. fleece-washed wool, shorn	13.8	197 051	0.12%	1	0.57
	80820	Pears & quinces, fresh	11.9	155 387	0.12%	4	0.56
	170111	Cane sugar, raw, in solid form, not cont. added flavouring/colouring matter ...	1.7	152 988	0.50%	2	0.65
	080550	Lemons (Citrus limon/limonum) & limes (Citrus aurantifolia/latifolia),	10.0	105 290	0.09%	1	0.58
	080520	Mandarins, incl. tangerines & satsumas; clementines, wilkings & sim. citrus	4.2	87 786	0.17%	1	0.58
	080940	Plums & sloes, fresh	16.3	60 084	0.03%	6	0.62
	080620	Grapes, dried	6.0	55 217	0.06%	2	0.59
	100510	Maize (corn), seed	3.4	49 601	0.10%	1	0.58
	510539	Fine animal hair, carded/combed, other than of Kashmire (cashmere) goats	20.2	42 635	0.02%	1	0.67
	510529	Wool tops & oth. combed wool other than combed wool in fragments	4.7	33 991	0.07%	1	0.69
	080930	Peaches, incl. nectarines, fresh	1.8	21 148	0.10%	6	0.65
	120220	Ground-nuts, not roasted/othw. cooked, shelled, whether or not broken	1.7	19 724	0.06%	1	0.74
	080910	Apricots, fresh	4.8	9 256	0.02%	5	0.66
	081040	Cranberries, bilberries & oth. fruits of the genus Vaccinium, fresh	1.3	6 950	0.04%	1	0.56
	081020	Raspberries, blackberries, mulberries & loganberries, fresh	2.1	6 554	0.03%	2	0.57
120210	Ground-nuts, not roasted/othw. cooked, in shell	2.7	4 188	0.01%	1	0.74	



	510310	Noils of wool/fine animal hair	5.3	2 114	0.00%	2	0.63
	510320	Waste of wool/of fine animal hair, incl. yarn waste but excl. garnetted sto ...	6.6	1 178	0.00%	1	0.56
	510119	Wool, not carded/combed, greasy, incl. fleece-washed wool, other than shorn ...	2.8	1 025	0.00%	1	0.57
	070420	Brussels sprouts, fresh/chilled	1.5	907	0.01%	1	0.57

Cluster	HS code	Product name	RTA	South Africa's average export value in USD (2009-2011)	Share of product in global agricultural trade (2007 - 2011)	Number of linkages in the product space	Average proximity of linkages
Agro-processing: food	220421	Wine other than sparkling wine of fresh grapes, incl. fortified; grape must	4.5	520 106	1.24%	6	0.62
	220429	Wine other than sparkling wine of fresh grapes, incl. fortified; grape must	11.8	199 521	0.15%	1	0.75
	030420	Fish fillets, frozen	1.4	90 704	0.51%	5	0.61
	220870	Liqueurs & cordials	2.9	58 855	0.18%	1	0.56
	230120	Flours, meals & pellets of fish/of crustaceans, molluscs/oth.	1.9	45 851	0.18%	2	0.58
	200892	Mixtures of edible parts of plants (excl. of 2008.19), prepd./presvd.,	8.5	37 566	0.04%	1	0.55
	200990	Mixtures of juices, unfermented & not cont. added spirit,	4.8	37 326	0.07%	1	0.59
	110100	Wheat/meslin flour	1.4	34 814	0.22%	1	0.67
	030269	Fish, n.e.s., fresh/chilled (excl. fillets/oth. fish meat of 03.04/livers &	1.9	33 569	0.15%	1	0.58
	210410	Soups & broths & preps. therefor	2.5	32 982	0.10%	2	0.56
	200980	Juice of any single fruit/veg. (excl. of 2009.11-2009.79), unfermented	1.6	27 617	0.11%	2	0.58
	200850	Apricots, prepd./presvd., whether or not cont. added sugar/oth. sweetening	29.2	26 319	0.01%	1	0.55
	200190	Vegetables, fruit, nuts & oth. edible parts of plants (excl. cucumbers	3.1	21 967	0.06%	2	0.56
	151710	Margarine (excl. liquid margarine)	2.2	21 207	0.08%	1	0.55
	200899	Edible parts of plants, prepd./presvd., whether or not cont. added sugar	1.1	19 211	0.09%	2	0.57
	030799	Molluscs & invertebrates (excl. of 0307.10-0307.60), frozen/dried/salted/	2.8	17 288	0.05%	1	0.57
	200939	Juice of any single citrus fruit other than orange/grapefruit (excl. of 200)	6.9	17 137	0.02%	2	0.59
160412	Herrings, prepd./presvd., whole/in pieces (excl. minced)	3.1	9 325	0.03%	1	0.60	
200971	Apple juice, of a Brix value not >20, unfermented & not cont. added spirit, ...	3.9	9 086	0.02%	2	0.60	

	081310	Apricots, dried	1.9	4 874	0.02%	1	0.60
	040110	Milk & cream, not concentrated/sweetened, fat content by wt. not >1%	1.5	4 803	0.03%	3	0.63
	020736	Meat & edible meat offal of ducks/geese/guinea fowls (excl. of 0207.32-0207)	1.6	4 395	0.03%	3	0.63
	190420	Prepared foods obt. from unroasted cereal flakes/mixts. of unroasted cereal	1.0	3 795	0.03%	1	0.60
	030232	Yellowfin tunas (Thunnus albacares), fresh/chilled (excl. fillets/oth. fish	3.1	2 050	0.01%	1	0.65
	230700	Wine lees; argol	1.0	80	0.00%	3	0.56

Cluster	HS code	Product name	RTA	South Africa's average export value in USD (2009-2011)	Share of product in global agricultural trade (2007 - 2011)	Number of linkages in the product space	Average proximity of linkages
Agro-processing: non-food	410210	Raw skins of sheep/lambs (fresh/salted/dried/limed/pickled/othw. presvd.	6.0	25 794	0.04%	1	0.58
	330113	Essential oils of lemon	3.7	7 556	0.02%	2	0.64
	050590	Skins & oth. parts of birds with feathers/down; feathers & parts of feather	9.3	7 034	0.01%	2	0.57
	510820	Yarn of fine animal hair, combed, not put up for retail sale	5.3	6 235	0.01%	1	0.67
	330119	Essential oils of citrus fruit, other than of bergamot/orange/lemon/lime	1.8	2 666	0.01%	2	0.63
	330112	Essential oils of orange	1.2	2 288	0.01%	1	0.56
	630120	Blankets (excl. elec.) & travelling rugs, of wool/of fine animal hair	1.3	1 090	0.01%	1	0.56
	580126	Chenille fabrics (excl. of 58.02/58.06), of cotton	2.2	347	0.00%	4	0.58
	410229	Raw skins of sheep/lambs (excl. of 4102.10 & 4102.21), fresh/salted/dried	1.1	336	0.00%	1	0.58
	410510	Tanned/crust skins of sheep/lambs, without wool, in wet state	2.9	267	0.02%	1	0.75
	410791	Leather furth. prepd. after tanning/crusting, incl. parchment-dressed leath	1.8	162	0.03%	1	0.58
	410621	Tanned/crust hides & skins of goats/kids, without wool/hair on, in the wet	4.9	10	0.01%	1	0.75
430110	Raw furskins, of mink, whole, with/without head/tail/paws	1.4	0.03	0.16%	2	0.64	



Cluster	HS code	Product name	RTA	South Africa's average export value in USD (2009-2011)	Share of product in global agricultural trade (2007 - 2011)	Number of linkages in the product space	Average proximity of linkages
Forestry	470200	Chemical wood pulp, dissolving grades	36.7	586 464	0.13%	1	0.57
	480256	Paper & paperboard, not cont. fibres obt. by a mech./chemi-mech. process... ..	3.5	120 522	0.27%	1	0.61
	470311	Chemical wood pulp, soda/sulphate, other than dissolving grades, unbleached ...	3.8	19 029	0.04%	2	0.67
	481930	Sacks & bags, having a base of a width of 40cm/more	1.3	6 322	0.04%	2	0.57
	482020	Exercise books of paper/paperboard	1.9	5 891	0.02%	1	0.56
	482040	Manifold business forms & interleaved carbon sets, of paper/paperboard	3.6	2 651	0.01%	1	0.59
	450200	Natural cork, debacked/roughly squared/in rect. (incl. square) blocks/plate ...	1.5	356	0.00%	3	0.62

Cluster	HS code	Product name	RTA	South Africa's average export value in USD (2009-2011)	Share of product in global agricultural trade (2007 - 2011)	Number of linkages in the product space	Average proximity of linkages
Agri-cultural inputs	380890	Rodenticides & oth. biocides, n.e.s, put up in forms or packings-RS/as prep ...	2.0	65 916	0.11%	1	0.57
	843629	Poultry-keeping mach. other than poultry incubators & brooders	1.3	17 857	0.08%	3	0.59
	310260	Double salts & mixts. of calcium nitrate & ammonium nitrate	11.6	14 287	0.01%	1	0.62



ANNEXURE II

Table A.2: Country ranking according to the agricultural complexity index

Rank	ISO code	Country	ACI	Rank	ISO code	Country	ACI
1	FIN	Finland	1.589	48	ISL	Iceland	0.394
2	DEU	Germany	1.493	49	GRC	Greece	0.394
3	BLR	Belarus	1.442	50	AUS	Australia	0.374
4	CZE	Czech Republic	1.385	51	TUN	Tunisia	0.356
5	SWE	Sweden	1.368	52	ARG	Argentina	0.341
6	AUT	Austria	1.313	53	ISR	Israel	0.315
7	CHE	Switzerland	1.286	54	ALB	Albania	0.258
8	SVN	Slovenia	1.270	55	JOR	Jordan	0.242
9	RUS	Russia	1.158	56	KGZ	Kyrgyz Republic	0.176
10	SVK	Slovak Republic	1.157	57	SLV	El Salvador	0.144
11	POL	Poland	1.110	58	BHR	Bahrain	0.137
12	HUN	Hungary	1.107	59	GEO	Georgia	0.127
13	DNK	Denmark	1.088	60	SAU	Saudi Arabia	0.124
14	CAN	Canada	1.063	61	MEX	Mexico	0.116
15	LUX	Luxembourg	1.041	62	PAK	Pakistan	0.115
16	LTU	Lithuania	1.027	63	BRA	Brazil	0.114
17	ROU	Romania	1.021	64	QAT	Qatar	0.108
18	ITA	Italy	1.016	65	BRB	Barbados	0.106
19	FRA	France	1.011	66	MUS	Mauritius	-0.014
20	GBR	United Kingdom	1.006	67	COL	Colombia	-0.044
21	LVA	Latvia	0.964	68	IND	India	-0.050
22	BEL	Belgium	0.951	69	ZAF	South Africa	-0.134
23	JPN	Japan	0.914	70	THA	Thailand	-0.136
24	IRL	Ireland	0.890	71	PER	Peru	-0.157
25	EST	Estonia	0.852	72	DOM	Dominican Republic	-0.157
26	HRV	Croatia	0.838	73	GTM	Guatemala	-0.157
27	BIH	Bosnia and Herzegovina	0.835	74	NAM	Namibia	-0.171
28	BGR	Bulgaria	0.815	75	BTN	Bhutan	-0.181
29	NOR	Norway	0.815	76	CRI	Costa Rica	-0.248
30	SRB	Serbia	0.798	77	VNM	Vietnam	-0.258
31	USA	United States	0.733	78	PRY	Paraguay	-0.264
32	ESP	Spain	0.721	79	AZE	Azerbaijan	-0.284
33	MDA	Moldova	0.692	80	MYS	Malaysia	-0.338
34	MNG	Mongolia	0.688	81	OMN	Oman	-0.395
35	ARM	Armenia	0.680	82	KAZ	Kazakhstan	-0.448
36	NZL	New Zealand	0.679	83	MDG	Madagascar	-0.500
37	NLD	Netherlands	0.664	84	LKA	Sri Lanka	-0.545
38	CHL	Chile	0.647	85	BOL	Bolivia	-0.560
39	PRT	Portugal	0.620	86	ZWE	Zimbabwe	-0.577
40	TUR	Turkey	0.614	87	DZA	Algeria	-0.591
41	MLT	Malta	0.605	88	BHS	The Bahamas	-0.601
42	HKG	Hong Kong SAR	0.552	89	NIC	Nicaragua	-0.616
43	URY	Uruguay	0.551	90	SGP	Singapore	-0.655
44	CHN	China	0.523	91	PAN	Panama	-0.664
45	KOR	Korea	0.468	92	ECU	Ecuador	-0.785
46	LBN	Lebanon	0.460	93	KHM	Cambodia	-0.809
47	CYP	Cyprus	0.403	94	SEN	Senegal	-0.865



Rank	ISO code	Country	Rank
95	ETH	Ethiopia	-0.901
96	TZA	Tanzania	-0.951
97	YEM	Yemen	-1.006
98	UGA	Uganda	-1.125
99	ZMB	Zambia	-1.138
100	PHL	Philippines	-1.195
101	MWI	Malawi	-1.236
102	GUY	Guyana	-1.351
103	RWA	Rwanda	-1.378
104	BLZ	Belize	-1.382
105	MDV	Maldives	-1.428
106	TGO	Togo	-1.455
107	CIV	Côte d'Ivoire	-1.526
108	GHA	Ghana	-1.562
109	NER	Niger	-1.562
110	BDI	Burundi	-1.820
111	BFA	Burkina Faso	-1.842
112	CMR	Cameroon	-1.917
113	NGA	Nigeria	-2.114
114	MOZ	Mozambique	-2.571
115	CAF	Central African Republic	-3.035
116	KIR	Kiribati	-3.133

**Table A.3: Overview of the most and least complex products in primary agriculture**

Top 15 products			
#	HS code	Product	PCI
1	100200	Rye	1.50
2	030191	Live trout	1.22
3	010392	Live swine, other than pure-bred, >50kg	1.08
4	120925	Rye grass seed used for sowing	1.01
5	120923	Fescue seed used for sowing	0.97
6	060230	Rhododendrons / Azaleas, grafted	0.96
7	120510	Low erucic acid rape/colza seed	0.96
8	100300	Barley	0.95
9	121020	Hop cones, fresh/dried	0.94
10	120922	Clover seed used for sowing	0.93
11	010310	Live swine, pure-bred breeding animals	0.79
12	510510	Wool & fine animal hair, carded	0.77
13	081040	Cranberries, bilberries other fruit of the genus Vaccinium, fresh	0.71
14	100810	Buckwheat	0.69
15	070959	Mushrooms, other than of the genus Agaricus, fresh	0.97
Bottom 15 products			
#	HS code	Product	PCI
1	530410	Sisal and other textile fibres of the genus Agave, raw	-6.15
2	070910	Globe artichokes, fresh/chilled	-5.04
3	081030	Black/white/red currants & gooseberries, fresh	-5.04
4	120300	Copra	-2.99
5	530521	Abaca fibres, raw	-2.98
6	520100	Cotton, not carded/combed	-2.48
7	180100	Cacao beans, whole/broken, raw/roasted	-2.26
8	170111	Cane sugar, raw	-2.09
9	120720	Cottons seed, whole/broken	-1.91
10	120210	Groundnuts, in shell	-1.89
11	080430	Pineapples, fresh/dried	-1.87
12	071410	Cassava	-1.85
13	080450	Guavas & mangoes, fresh/dried	-1.76
14	080119	Coconuts	-1.72
15	080720	Papaws, fresh/dried	-1.66

**Table A.4: Overview of the most and least complex products in agro-processing: food**

Top 15 products			
#	HS code	Product	PCI
1	110813	Potato starch	1.35
2	040610	Blue-veined cheese	1.29
3	020733	Meat of ducks/geese/guinea fowls, uncut, frozen	1.28
4	020726	Cuts and edible offal of turkey, fresh/chilled	1.27
5	151419	Low erucic acid rape/colza oil	1.26
6	020736	Edible offal of ducks/geese/guinea fowls, frozen	1.25
7	150600	Animal fats & oils, fractions, not chemically modified	1.24
8	020630	Edible offal of swine, fresh/chilled	1.23
9	020713	Cuts and edible offal of Galus Domesticus, fresh/chilled	1.22
10	020735	Edible offal of ducks/geese/guinea fowls, fresh/chilled	1.22
11	020734	Fatty livers of duck/geese/guinea fowls, fresh/chilled	1.22
12	130213	Saps and extracts of hops	1.17
13	020120	Meat of bovine animals, bone-in, fresh/chilled	1.14
14	020312	Hams and cuts of shoulder, bone-in, fresh/chilled	1.14
15	160412	Herrings, prepared/preserved, whole/in pieces	1.13
Bottom 15 products			
#	HS code	Product	PCI
1	230650	Oil-cake and other solid residues, from extraction of coconut/copra	-3.66
2	110230	Rice flour	-2.99
3	140300	Vegetable mats. of a kind used primarily in brooms/brushes	-2.99
4	230220	Bran, sharps and other residues, derived from the milling of rice	-2.99
5	151311	Coconut (copra) oil, crude	-2.70
6	090111	Coffee, not roasted, not decaffeinated	-2.32
7	151190	Palm oil, other than crude, & fractions thereof, not chemically modified	-2.31
8	230610	Oil-cake and other solid residues, from extraction of cotton seeds	-2.09
9	151110	Palm oil, crude	-1.86
10	180400	Cocoa butter, fat & oil	-1.82
11	151321	Palm kernel/babassu oil, crude	-1.75
12	030342	Yellowfin tunas, frozen	-1.72
13	030559	Dried fish other than cod whether or not salted but not smoked	-1.70
14	170310	Cane molasses	-1.65
15	090220	Tea, green (not fermented), whether or not flavoured, in packings >3kg	-1.44

**Table A.5: Overview of the most and least complex products in agro-processing: non-food**

Top 15 products			
#	HS code	Product	PCI
1	530121	Flax, broken/scutched	1.39
2	530129	Flax, hackled/othw. processed but not spun	1.39
3	530610	Flax yarn, single	1.13
4	530921	Woven fabrics of flax, cont.< 85% by wt. of flax, unbleached/bleached	1.12
5	430110	Raw furskins, of mink, whole, with/without head/tail/paws	1.11
6	520644	Cotton yarn, mult./cab. (excl. sewing thread), of combed fibres, cont. <85%	1.09
7	511130	Woven fabrics of carded wool/carded fine animal hair	1.09
8	530130	Flax tow & waste	1.08
9	580122	Cut corduroy, of cotton	1.07
10	511300	Woven fabrics of coarse animal hair/horsehair	1.07
11	530620	Flax yarn, mult./cab.	1.06
12	530911	Woven fabrics of flax, cont. 85%/more by wt. of flax, unbleached/bleached	1.05
13	511219	Woven fabrics of combed wool/combed fine animal hair, cont. 85%/more	1.03
14	521152	Woven fabrics of cotton, cont. <85% by wt. of cotton, mixed	1.03
15	620111	Men's/boys overcoats, raincoats, car coats, capes of wool/fine animal hair	1.01
Bottom 15 products			
#	HS code	Product	PCI
1	530490	Sisal & oth. textile fibres of the genus Agave, raw/processed but not spun; tow	-6.16
2	50900	Natural sponges of animal origin	-2.99
3	330111	Essential oils of bergamot	-2.99
4	530519	Coconut fibres, processed but not spun; tow, noils & waste of these fibres	-2.99
5	530529	Abaca (Manila hemp/Musa textilis Nee) fibres, processed but not spun; tow	-2.99
6	610411	Women's/girls' suits, knitted or crocheted, of wool/fine animal hair	-2.99
7	610412	Women's/girls' suits, knitted or crocheted, of cotton	-2.99
8	610421	Women's/girls' ensembles, knitted or crocheted, of wool/fine animal hair	-2.99
9	611110	Babies' garments & clothing access, knitted or crocheted, wool/fine animal hair	-2.99
10	611410	Garments, n.e.s., knitted or crocheted, of wool/fine animal hair	-2.99
11	620510	Men's/boys' shirts (excl. knitted or crocheted), of wool/fine animal hair	-2.99
12	620910	Babies' garments & clothing accessories, wool/fine animal hair	-2.99
13	621310	Handkerchiefs, of silk/silk waste	-2.99
14	630611	Tarpaulins, awnings & sunblinds, of cotton	-2.99
15	410621	Tanned/crust hides & skins of goats/kids, without wool/hair on, in wet state	-1.99



Table A.6: Overview of the most and least complex products in forestry

Top 15 products			
#	HS code	Product	PCI
1	481022	Light-wt. coated paper, coated on one/both sides with kaolin	1.60
2	480240	Wallpaper base	1.53
3	480261	Paper & paperboard, of which >10% mech./chemi-mech. process, in rolls	1.52
4	481410	Ingrain paper	1.50
5	481031	Kraft paper & paperboard, other than that of a kind used for writing / printing / oth. graphic purps., coated / bleached, weighing <150gm/m2/	1.45
6	440392	Beech (Fagus spp.), in the rough, whether or not stripped of bark / sapwood / roughly squared	1.34
7	482320	Filter paper & paperboard, cut to size/shape	1.34
8	440130	Sawdust & wood waste & scrap, whether or not agglom. in logs / briquettes / pellets/sim. forms	1.31
9	481019	Paper & paperboard of a kind used for writing/printing/oth. graphic purps., coated	1.30
10	481029	Paper & paperboard of a kind used for writing/printing/oth. graphic purps., coated on one/both sides with kaolin.	1.29
11	470691	Pulps of fibres derived from recovered (waste & scrap) paper/paperboard/of fibrous cellulosic mat. (excl. of 4706.10 & 4706.20), mech.	1.27
12	470500	Wood pulp obt. by a combination of mech. & chem. pulping processes	1.24
13	440391	Oak (Quercus spp.), in the rough, whether or not stripped of bark/sapwood/roughly squared	1.23
14	480830	Kraft paper (excl. sack kraft paper), creped/crinkled, whether or not embossed/perforated, in rolls/sheets	1.23
15	481039	Kraft paper & paperboard other than that of a kind used for writing / printing / oth. graphic purps., coated., whether or not surface-coloured / decorated / printed,	1.23
Bottom 15 products			
#	HS code	Product	PCI
1	480910	Carbon/sim. copying papers, whether or not printed, in rolls >36cm. side / sheets of >36cm x >15cm	-2.99
2	481430	Wallpaper & sim. wall coverings, consisting of paper covered, on the face side, with plaiting mat., whether or not bound together in parallel strands/woven	-2.99
3	481610	Carbon/sim. copying papers, whether or not put up in boxes	-2.99
4	440349	Topical wood spec. in the rough, whether or not stripped of bark / sapwood / roughly squared	-2.91
5	400122	Technically spec. nat. rubber (TSNR)	-2.30
6	400110	Natural rubber latex, whether or not pre-vulcanised	-2.00
7	440799	Wood sawn/chipped length wise, sliced/peeled, whether or not planed, sanded / end-jointed, of a thkns. >6mm	-0.90
8	482020	Exercise books of paper/paperboard	-0.70
9	481390	Cigarette paper	-0.28
10	440839	Sheets for veneering, incl. those obt. by slicing laminated wood, for plywood not >6mm, of tropical wood	-0.26
11	441300	Densified wood, in blocks/plates/strips/profile shapes	-0.25
12	450190	Waste cork; crushed/granulated/ground cork	-0.23
13	440610	Railway/tramway sleepers (cross-ties) of wood, not impregnated	-0.22
14	940150	Seats of cane/osier/bamboo/sim. mats.	-0.18
15	440690	Railway/tramway sleepers (cross-ties) of wood, other than those not impregnated	-0.16

**Table A.7: Overview of the most and least complex products in agricultural inputs**

Top 15 products			
	HS code	Product	PCI
1	843330	Haymaking mach.	1.39
2	843353	Root/tuber harvesting machines	1.35
3	843320	Mowers (excl. those for lawns/parks/sports-grounds), incl. cutter bars for tractor mounting	1.28
4	843229	Harrows, other than disc harrows, scarifiers, cultivators, weeders & hoes	1.28
5	843510	Presses, crushers & sim. mach. used in the mfr. of wine/cider/fruit juices/sim. beverages	1.27
6	843680	Agricultural/horticultural/forestry/bee-keeping mach, incl. germination plant fitted with mech./thermal equip.	1.27
7	310280	Mixtures of urea & ammonium nitrate in aqueous/ammoniacal solution	1.25
8	843340	Straw/fodder balers, incl. pick-up balers	1.22
9	843390	Parts of the mach. of 843390	1.20
10	843850	Machinery for the preparation of meat/poultry	1.20
11	843810	Bakery mach. & mach. for the mfr. of macaroni/spaghetti/sim. prods.	1.20
12	843699	Parts of oth. agricultural/horticultural/forestrybee-keeping mach., incl. germination plant fitted with mech./thermal equip.	1.18
13	310240	Mixtures of ammonium nitrate with calcium carbonate/oth. inorganic non-fertilising subs.	1.13
14	843820	Machinery for the mfr. of confectionery/cocoa/chocolate	1.11
15	843351	Combine harvester-threshers	1.10
Bottom 15 products			
	HS code	Product	PCI
1	380810	Insecticides, put up in forms or packings-RS/as preps./arts.	-0.31
2	380890	Rodenticides & oth. biocides, n.e.s, put up in forms or packings-RS/as preps./arts.	-0.19
3	843780	Machines for used in the milling industry/for the working of cereals/dried leguminous vegetables (excl. farm-type mach.)	0.13
4	380820	Fungicides, put up in forms or packings-RS/as preps./arts.	0.17
5	310560	Mineral/chem. fertilisers cont. the 2 fertilising elements phosphorus & potassium	0.23
6	843221	Disc harrows	0.37
7	871620	Self-loading/self-unloading trailers & semi-trailers for agricultural purps.	0.46
8	843621	Poultry incubators & brooders	0.48
9	843629	Poultry-keeping mach. other than poultry incubators & brooders	0.63
10	310260	Double salts & mixts. of calcium nitrate & ammonium nitrate	0.68
11	843590	Parts of the mach. of 8435.10	0.76
12	843210	Ploughs	0.78
13	843410	Milking machines	0.81
14	843360	Machines for cleaning/sorting/grading eggs/fruit/oth. agricultural produce	0.81
15	380840	Disinfectants, put up in forms or packings-RS/as preps./arts.	0.83

Table A.8: Overview of South Africa's most complex core competencies in the agro-complex

#	HS code	Product	Cluster	PCI	Type of product	Located in the agricultural product space?
1	020736	Meat & edible meat offal of ducks/geese/guinea fowls (excl. of 0207.32-0207.34), frozen	Agro-processing: food	1.25	Niche product	Yes
2	160412	Herrings, prepd./presvd., whole/in pieces (excl. minced)	Agro-processing: food	1.13	Niche product	Yes
3	430110	Raw furskins, of mink, whole, with/without head/tail/paws	Agro-processing: non-food	1.11	Mass product	Yes
4	190420	Prepared foods obt. from unroasted cereal flakes/mixts. of unroasted cereal flakes & roasted cereal flakes/swelled cereals	Agro-processing: food	1.00	Niche product	Yes
5	470620	Pulps of fibres derived from recovered (waste & scrap) paper/paperboard	Forestry	0.83	Niche product	No
6	470311	Chemical wood pulp, soda/sulphate, other than dissolving grades, unbleached, coniferous	Forestry	0.82	Niche product	Yes
7	470329	Chemical wood pulp, soda/sulphate, other than dissolving grades, semi-bleached/bleached, non-coniferous	Forestry	0.82	Mass product	No
8	580126	Chenille fabrics of cotton	Agro-processing: non-food	0.81	Niche product	Yes
9	410330	Raw hides & skins of swine (fresh / salted / dried / limed / pickled / othw. presvd. but not tanned/parchment-dressed/furth. prepd.)	Agro-processing: non-food	0.77	Niche product	No
10	200850	Apricots, prepd./presvd., whether or not cont. added sugar / oth. sweetening matter/spirit, n.e.s.	Agro-processing: food	0.72	Niche product	Yes
11	081040	Cranberries, bilberries & oth. fruits of the genus Vaccinium, fresh	Primary agriculture	0.71	Niche product	Yes
12	410791	Leather furth. prepd. after tanning/crusting, incl. parchment-dressed leather, of bovine (incl. buffalo)/equine animals, without hair on, other than whole hides & skins, full grains, unsplit	Agro-processing: non-food	0.70	Niche product	Yes
13	310260	Double salts & mixts. of calcium nitrate & ammonium nitrate	Agricultural inputs	0.68	Niche product	Yes
14	410792	Leather furth. prepd. after tanning/crusting, incl. parchment-dressed leather, of bovine (incl. buffalo)/equine animals, without hair on, other than whole hides & skins, grain splits	Agro-processing: non-food	0.67	Mass product	No
15	480256	Paper & paperboard, not cont. fibres obt. by a mech./chemi-mech. process...in sheets with one side not >435mm	Forestry	0.65	Mass product	Yes
16	843629	Poultry-keeping mach. other than poultry incubators &	Agricultural inputs	0.63	Mass product	Yes



		brooders				
17	480419	Kraftliner, uncoated, other than unbleached, in rolls/sheets	Forestry	0.62	Mass product	No
18	450200	Natural cork, debarked/roughly squared/in rect. (incl. square) blocks / plates / sheets / strip	Forestry	0.61	Niche product	Yes
19	570231	Carpets & oth. textile floor coverings, woven, of pile construction, not made up, of wool/fine animal hair	Agro-processing: non-food	0.52	Niche product	No
20	482040	Manifold business forms & interleaved carbon sets, of paper/paperboard	Forestry	0.51	Niche product	Yes
21	630120	Blankets (excl. elec.) & travelling rugs, of wool/of fine animal hair	Agro-processing: non-food	0.50	Niche product	Yes
22	480269	Uncoated paper & paperboard...& non-perforated punch-cards & punch tape paper...; hand-made paper & paperboard	Forestry	0.49	Niche product	No
23	080910	Apricots, fresh	Primary agriculture	0.49	Niche product	Yes
24	470200	Chemical wood pulp, dissolving grades	Forestry	0.48	Mass product	Yes
25	200971	Apple juice, of a Brix value not >20, unfermented & not cont. added spirit, whether or not cont. added sugar / oth. sweetening matter	Agro-processing: food	0.48	Niche product	Yes
29	80810	Apples, fresh	Primary agriculture	0.46	Mass product	Yes
27	430230	Tanned/dressed furskins, whole skins & pieces/cuttings thereof, assembled (without the addition of oth. mats	Agro-processing: non-food	0.44	Niche product	No
28	081310	Apricots, dried	Agro-processing: food	0.41	Niche product	Yes
29	080930	Peaches, incl. nectarines, fresh	Primary agriculture	0.40	Mass product	Yes
30	220421	Wine other than sparkling wine of fresh grapes, incl. fortified; grape must with fermentation prevented/arrested by the addition of alcohol, in conts. of 2 l/less	Agro-processing: food	0.39	Mass product	Yes
31	080940	Plums & sloes, fresh	Primary agriculture	0.39	Niche product	Yes
32	081020	Raspberries, blackberries, mulberries & loganberries, fresh	Primary agriculture	0.38	Niche product	Yes
33	480220	Paper & paperboard, uncoated, of a kind used as a base for photo-sensitive/heat-sensitive/electro-sensitive paper/paperboard	Forestry	0.37	Niche product	No
34	220870	Liqueurs & cordials	Agro-processing: food	0.36	Mass product	Yes
35	220429	Wine other than sparkling wine of fresh grapes, incl. fortified; grape must with fermentation prevented/arrested by the addition of alcohol, in conts. of >2 l	Agro-processing: food	0.36	Mass product	Yes
36	080820	Pears & quinces, fresh	Primary agriculture	0.35	Mass product	Yes
37	110812	Maize (corn) starch	Agro-processing: food	0.34	Niche product	No



38	021091	Meat & edible meat offal of primates, salted/in brine/dried/smoked, incl. edible flours/meals	Agro-processing: food	0.34	Niche product	No
39	411320	Leather furth. prepd. after tanning/crusting, incl. parchment-dressed leather, of swine, without wool/hair on, whether or not split,	Agro-processing: non-food	0.33	Niche product	No
40	481099	Paper & paperboard, coated on one/both sides with kaolin...whether or not surface-coloured/surface-decorated/printed,	Forestry	0.31	Niche product	No
41	200791	Citrus fruit preps. (excl. homogenized), obt. by cooking, whether or not cont. added sugar/oth. sweetening matter	Agro-processing: food	0.30	Niche product	No
42	030378	Hake (Merluccius spp., Urophycis spp.), frozen	Agro-processing: food	0.29	Niche product	No
43	230700	Wine lees; argol	Agro-processing: food	0.29	Niche product	Yes
44	200892	Mixtures of edible parts of plants prepd./presvd., whether or not cont. added sugar/oth. sweetening matter/spirit, n.e.s.	Agro-processing: food	0.28	Niche product	Yes
45	510320	Waste of wool/of fine animal hair, incl. yarn waste but excl. garnetted stock, other than noils of wool/fine animal hair	Primary agriculture	0.24	Niche product	Yes
46	020890	Meat & edible meat offal, n.e.s., fresh/chilled/frozen	Agro-processing: food	0.22	Niche product	No
47	482090	Blotting-pads, binders (loose-leaf/oth.), book covers & oth. arts. of stationery, n.e.s., of paper/paperboard	Forestry	0.19	Niche product	No
48	200190	Vegetables, fruit, nuts & oth. edible parts of plants (excl. cucumbers & gherkins), prepd./presvd. by vinegar/acetic acid	Agro-processing: food	0.19	Niche product	Yes
49	200921	Grapefruit juice, of a Brix value not >20, unfermented & not cont. added spirit, whether or not cont. added sugar/oth. sweetening matter	Agro-processing: food	0.18	Niche product	No
50	080540	Grapefruit, fresh/dried	Primary agriculture	0.17	Niche product	No
51	160290	Preparations of prepd./presvd. meat (, incl. preps. of blood of any animal	Agro-processing: food	0.17	Niche product	No
52	040110	Milk & cream, not concentrated/sweetened, fat content by wt. not >1%	Agro-processing: food	0.17	Niche product	Yes
53	200961	Grape juice, incl. grape must, of a Brix value not >30, unfermented & not cont. added spirit, whether or not cont. added sugar/oth. sweetening matter	Agro-processing: food	0.17	Niche product	No
54	030371	Sardines (Sardina pilchardus, Sardinops spp.)/sardinella (Sardinella spp.)/brisling/sprats (Sprattus sprattus), frozen	Agro-processing: food	0.17	Niche product	No
55	510310	Noils of wool/fine animal hair	Primary agriculture	0.15	Niche product	Yes
56	510529	Wool tops & oth. combed wool other than combed wool in	Primary agriculture	0.14	Niche product	Yes



		fragments				
57	050590	Skins & oth. parts of birds with feathers/down; feathers & parts of feathers; powder & waste of feathers/parts of feathers	Agro-processing: non-food	0.13	Niche product	Yes
58	060410	Mosses & lichens	Primary agriculture	0.11	Niche product	No
59	200840	Pears, prepd./presvd., whether or not cont. added sugar/oth. sweetening matter/spirit, n.e.s.	Agro-processing: food	0.11	Niche product	No
60	440122	Wood, in chips/particles, non-coniferous	Forestry	0.10	Mass product	No
61	121291	Sugar beet, fresh/chilled/frozen/dried, whether or not ground	Primary agriculture	0.09	Niche product	No
62	481930	Sacks & bags, having a base of a width of 40cm/more	Forestry	0.08	Niche product	Yes
63	200870	Peaches, incl. nectarines, prepd./presvd., whether or not cont. added sugar/oth. sweetening matter/spirit, n.e.s.	Agro-processing: food	0.05	Niche product	No
64	220600	Fermented beverages (e.g., cider, perry, mead), n.e.s.; mixts. of fermented beverages & mixts. of fermented beverages & non-alcoholic beverages, n.e.s.	Agro-processing: food	0.03	Niche product	No
65	510119	Wool, not carded/combed, greasy, incl. fleece-washed wool, other than shorn	Primary agriculture	0.03	Niche product	Yes
66	080520	Mandarins, incl. tangerines & satsumas; clementines, wilkings & sim. citrus hybrids, fresh/dried	Primary agriculture	0.00	Mass product	Yes
67	080610	Grapes, fresh	Primary agriculture	0.00	Mass product	Yes

**Table A.9: Labour intensities in the agro-complex**

ISIC category	Labour intensity	Normalised labour intensity index
Growing of grains (eg. maize, wheat, barley etc.), oil seeds	3.5	0.075
Growing of vegetables	21.9	0.503
Growing of other horticultural specialities and nursery products	19.2	0.439
Growing of fruit	9.3	0.209
Growing of vineyards	13.8	0.315
Growing sugar cane	15.1	0.344
Growing of cotton	26.3	0.604
Growing of other crops (eg. Spices) / unspecified	43.3	1.000
Animals for meat, including breeding but excluding chicken, game	18.1	0.414
Chickens, including breeding and slaughtering	2.5	0.053
Dairy farming, including milk etc. & eggs)	3.2	0.069
Sheep and goats	18.3	0.419
Ostrich	3.1	0.066
Other animal farming	3.2	0.068
Forestry	14.1	0.321
Fisheries	1.2	0.022
Manufacturing of food	0.9	0.015
Manufacture of beverages	1.1	0.020
Manufacture of tobacco products	0.3	0.000
Manufacturing of textiles	1.4	0.026
Manufacturing of wood products	3.4	0.073
Manufacture of paper and paper products	1.1	0.019
Manufacturing of chemicals (e.g. fertilisers, pesticides)	0.4	0.003
Manufacture of special purpose machinery (e.g. agricultural machinery)	0.8	0.013
Manufacture of motor vehicles (e.g. tractors)	0.4	0.004

Source: Own calculations based on data from DAFF, Quantec and StatsSA (2013)