

**Table 2.** Genetic (above diagonal) and phenotypic (below) correlations for post-weaning growth traits and carcass attributes

Trait	i. Post-weaning growth traits			ii. Carcass attributes						
				1. Carcass composition traits			2. Carcass meatiness Traits			
	WW	SW	DG	MP	FP	BP	CW	DP	MB	MF
<i>i. Post-weaning growth traits</i>										
• Weaning weight, gm (WW)	-	0.81	0.18	-0.23	0.08	-0.36	0.50	0.10	0.09	-0.01
• Slaughter weight, gm (SW)	0.82	-	0.59	-0.35	0.04	-0.60	0.83	0.11	0.15	-0.01
• Daily gain, gm /day (DG)	0.20	0.60	-	-0.05	0.26	-0.58	0.38	0.24	0.13	-0.03
<i>ii. Carcass attributes</i>										
<b>1. Carcass composition traits</b>										
• Muscle percentage (MP)	0.01	0.12	0.23	-	0.47	0.05	-0.47	0.38	-0.03	0.03
• Fat percentage (FP)	0.16	0.31	0.50	0.56	-	0.24	-0.20	0.29	-0.16	-0.03
• Bone percentage (BP)	-0.33	-0.47	-0.54	-0.09	-0.04	-	-0.45	-0.45	-0.33	0.02
<b>2. Carcass meatiness traits</b>										
• Carcass weight (CW)	0.47	0.83	0.63	0.10	0.29	-0.38	-	-0.13	0.12	-0.01
• Dressing Percentage (DP)	0.17	0.21	0.31	0.09	0.48	-0.49	0.09	-	0.14	-0.01
• Muscle: bone (MB)	0.09	0.16	0.20	0.16	0.10	-0.36	0.16	0.23	-	-0.92
• Muscle: Fat (MF)	-0.01	-0.02	-0.04	-0.02	-0.13	0.02	-0.02	-0.02	-0.02	-

**Table 3.** Weighing factors, indices standard deviation ( $\sigma_I$ ), accuracy of selection ( $r_{TI}$ ) estimated from each index ( $I$ ) and relative efficiency (RE) to the full index ( $I_1=100$ )

Selection alternatives	Index	Index trait	Weighing factors*			$\sigma_I$	$r_{TI}$	RE%
	$I$		WW	SW	DG			
<i>i. Full index</i>	$I_1$	WW, SW, DG	6.39	-1.85	150.92	809.7	0.81	100
<i>ii. Reduced index</i>	$I_2$	WW, SW	4.07	0.29	-	761.78	0.72	88.9
	$I_3$	WW, DG	4.21	-	71.74	788.41	0.79	97.5
	$I_4$	SW, DG	-	2.46	-18.71	650.41	0.65	80.2
<i>iii. Single index</i>	$I_5$	WW	4.46	-	-	760.32	0.76	93.8
	$I_6$	SW	-	2.34	-	648.90	0.65	80.2
	$I_7$	DG	-	-	119.95	355.83	0.35	43.2

\*: WW= Weaning weight; SW= Slaughter weight, DG= Daily gain

**Table 4.** Expected genetic change to selection per generation for post-weaning growth traits and carcass attributes (selection intensity = 1)

Trait	Unit	Selection alternatives						
		Full index	Reduced index				Single index	
		$I_1$	$I_2$	$I_3$	$I_4$	$I_5$	$I_6$	$I_7$
	WW, SW, DG	WW, SW	WW, DG	SW, DG	WW	SW	DG	
<b>i. Post-weaning growth traits</b>								
• Weaning weight (WW)	gm	121.35	116.06	112.93	78.83	118.46	76.66	18.74
• Slaughter weight (SW)	gm	135.52	126.57	135.31	120.65	124.70	121.55	80.60
• Daily gain (DG)	gm/day	0.78	0.39	0.73	0.76	0.32	0.86	1.61
<b>ii. Carcass attributes</b>								
<b>1. Carcass composition traits</b>								
• Muscle percentage (MP)	unit	0.67	0.79	0.82	0.99	0.75	0.99	0.50
• Fat percentage (FP)	unit	0.59	0.31	0.44	0.21	0.31	0.24	0.60
• Bone percentage (BP)	unit	-0.31	-0.45	-0.42	-0.53	-0.43	-0.52	-0.10
<b>2. Carcass meatiness traits</b>								
• Carcass weight (CW)	gm	-0.73	-0.59	-0.73	-0.70	-0.56	-0.74	-0.80
• Dressing Percentage (DP)	unit	0.38	0.13	0.24	0.02	0.14	0.05	0.40
• Muscle: bone (MB)	unit	0.36	0.30	0.36	0.35	0.28	0.36	0.37
• Muscle: Fat (MF)	unit	-1.6	-0.41	-1.40	-1.53	-0.23	-1.82	-4.41

\*: WW= Weaning weight; SW= Slaughter weight, DG= Daily gain