

Gambia Goat Project Sensitivity

DTG 3/22/2017

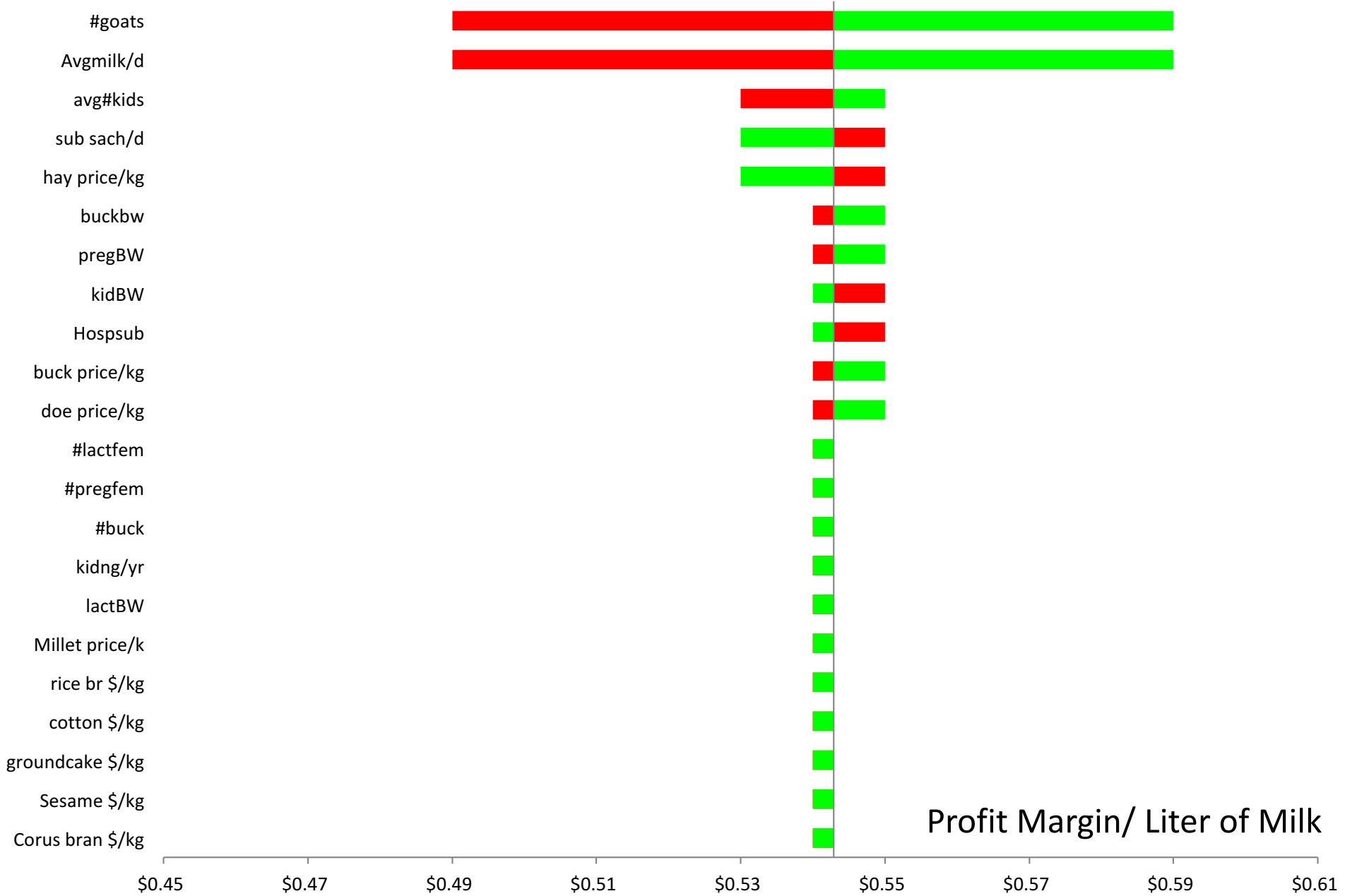
Outcome Parameter of Interest

- Profit Margin per Liter of Milk

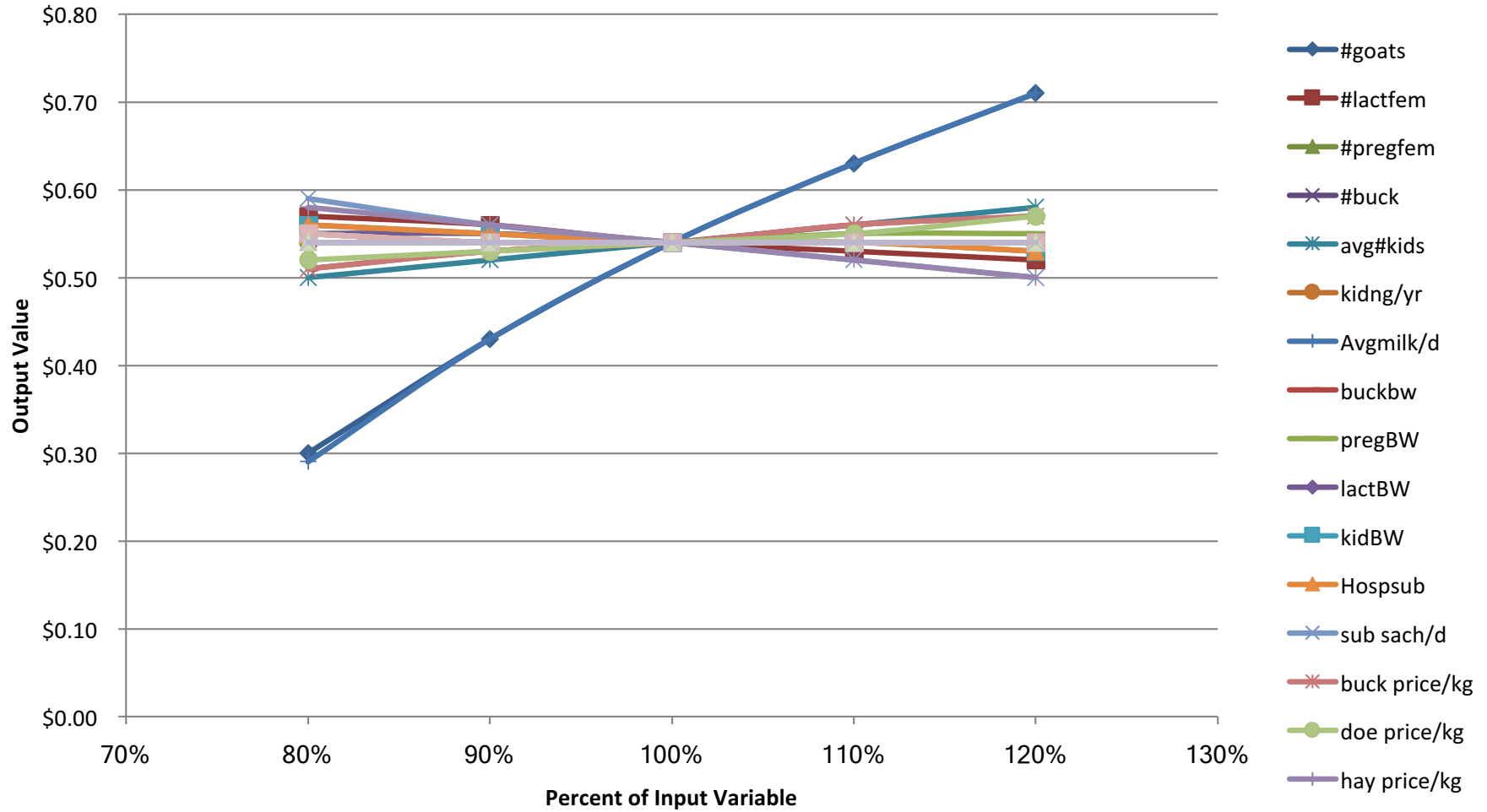
Base Parameters (+/-) 5% Change

Parameters		Min	Max
Number of milking goats	50.00	47.5	52.5
Average number of lactating females	43.30	41.135	45.465
Average number of pregnant females	6.70	6.365	7.035
Number of bucks	5.00	4.75	5.25
Average number of kids on farm	77.33	73.4635	81.1965
Kiddings per year	1.50	1.425	1.575
Average milk yeild (L/day)	2.00	1.9	2.1
Average buck bodyweight (kg)	55.00	52.25	57.75
Average pregnant female bodyweight (kg)	45.00	42.75	47.25
Average lactating female bodyweight (kg)	45.00	42.75	47.25
Average kid bodyweight (kg)	22.50	21.375	23.625
Hospital subsidy as percentage of daily sales (%)	5%	0.0475	0.0525
Subsidized sachets given freely to patients per day	25	23.75	26.25
Buck selling price per kg (USD)	\$1.38	1.311	1.449
Doe selling price per kg (USD)	\$1.25	1.1875	1.3125
Groundnut hay price per kg (USD)	\$0.10	0.095	0.105
Millet bran price per kg (USD)	\$0.13	0.1235	0.1365
Rice bran price per kg (USD)	\$0.35	0.3325	0.3675
Cottonseed cake price per kg (USD)	\$0.35	0.3325	0.3675
Groundnut cake price per kg (USD)	\$0.35	0.3325	0.3675
Sesame cake price per kg (USD)	\$0.13	0.1235	0.1365
Cous bran price per kg (USD)	\$0.13	0.1235	0.1365

Tornado Diagram



Spider Graph



Short Parameter Names

Number of milking goats	#goats
Average number of lactating females	Avgmilk/d
Average number of pregnant females	avg#kids
Number of bucks	sub sach/d
Average number of kids on farm	hay price/kg
Kiddings per year	buckbw
Average milk yeild (L/day)	pregBW
Average buck bodyweight (kg)	kidBW
Average pregnant female bodyweight (kg)	Hospsub
Average lactating female bodyweight (kg)	buck price/kg
Average kid bodyweight (kg)	doe price/kg
Hospital subsidy as percentage of daily sales (%)	#lactfem
Subsidized sachets given freely to patients per day	#pregfem
Buck selling price per kg (USD)	#buck
Doe selling price per kg (USD)	kidng/yr
Groundnut hay price per kg (USD)	lactBW
Millet bran price per kg (USD)	Millet price/k
Rice bran price per kg (USD)	rice br \$/kg
Cottonseed cake price per kg (USD)	cotton \$/kg
Groundnut cake price per kg (USD)	groundcake \$/kg
Sesame cake price per kg (USD)	Sesame \$/kg
Cous bran price per kg (USD)	Corus bran \$/kg