Dairy Sector in Uganda

17th January 2019

1. Sales

1.1. Farmers

Table 1: Farmer Characteristics

Sales	Direct Neighbor			Trader to MCC			Trans	sp to N	1CC	Direct MCC		
	Mean	Sd	Obs	Mean	Sd	${\rm Obs}$	Mean	Sd	${\rm Obs}$	Mean	Sd	Obs
Num HH Members	6.7	3.0	386	7.4	3.1	488	7.4	3.9	160	7.2	3.4	201
HH Head Female	0.1	0.3	386	0.1	0.3	488	0.1	0.3	160	0.05	0.2	201
HH Head Completed Primary	0.19	0.4	385	0.22	0.4	487	0.26	0.4	160	0.24	0.4	200
KM to Nearest												
Tarmac road	10.5	12.0	367	21.7	19.0	431	21.9	19.3	153	17.4	16.9	180
Murram Road	1.3	2.4	382	2.5	3.5	485	2.9	3.5	158	2.3	3.2	201
MCC	12.6	11.2	322	7.5	7.8	478	7.0	5.8	158	5.1	6.1	200
Neighbor	0.3	0.4	386	0.5	0.7	487	0.5	0.7	159	0.5	0.8	200
Market	4.9	4.4	383	7.7	5.6	477	8.6	5.8	159	8.1	6.4	192

Overall, the basic household characteristics are about the same across all sales outlets. Households have on average 7 members, with about 10% of households having a female head and about 20% of the households have a head who completed primary school. However, we see that remoteness may play a role in who the farmers sell to. Those who sell directly to their neighbor live, on average, closest to the tarmac and murram roads as well as the nearest market. And also closest to their neighbor (as expected). They tend to live the farthest from a MCC. Those to tell to one of the other three outlets, to a trader or transporter who sells to MCC or directly to MCC are fairly similar. With the exception of those who sell direct to a MCC live closest (as expected). Those who sell to a transporter (who may charge more) tend to live the farthest from tarmac and murram roads as well as a market suggesting they are the most remote farmers.

1.1.1. Gender

1.1.2. Seasonality

Table 2: Dry Season Sales

Sales	Direct Neighbor		Trad	Trader to MCC			sp to MCC		Direct MCC			
	Mean	Sd	${\rm Obs}$	Mean	Sd	${\rm Obs}$	Mean	Sd	${\rm Obs}$	Mean	Sd	Obs
Local Cows	2.41	3.63	381	4.15	6.59	479	4.84	8.22	158	3.49	5.47	206
Local Cows Abv 8yrs	0.95	1.63	260	1.76	2.98	268	2.85	3.86	74	1.87	2.86	92
Local Cows Prod	2.72	2.03	268	2.19	2.03	278	2.74	3.17	78	2.53	2.21	95
Exotic Cowns	0.85	1.83	381	5.05	6.12	480	8.16	10.55	156	6.86	7.61	200
Exotic Cows Abv 8yrs	0.46	1.21	131	1.34	2.55	362	2.17	4.25	127	1.66	2.82	162
Exotic Cows Prod	5.47	4.91	131	5.45	7.18	369	5.47	8.00	128	9.04	12.29	165
Price	948.12	225.50	133	863.97	206.41	370	915.45	196.63	130	940.99	205.69	161
Lowest Price	884.48	207.79	319	749.44	203.36	449	800.68	210.91	146	821.66	213.58	187
Highest Price	1018.03	243.01	319	940.80	192.33	448	988.01	200.89	146	1018.45	182.78	187
Avg Amt Sold Per Day	4.68	5.70	320	15.07	15.98	453	17.70	18.12	150	20.34	18.01	190
Avg Amt Consumed Per Day	2.29	1.45	323	3.72	1.89	453	4.04	2.05	148	4.48	2.18	190
Avg Amt Given Per Day	0.45	1.18	317	0.70	1.51	451	0.85	1.89	148	0.96	1.62	185
Avg Amt Fed to Calves Per Day	0.94	1.60	204	1.85	2.69	248	1.20	2.30	72	1.82	2.67	112
Avg Amt Processed Per Day	0.45	1.06	312	1.82	1.84	436	1.59	1.84	147	2.07	2.26	182
Avg Amt Milked Per Day	13.26	21.41	327	44.31	105.76	462	68.03	151.38	151	78.65	141.13	193
dry_income	6684.27	7188.42	124	15760.31	15798.43	354	18179.55	18201.93	124	22481.21	18939.12	157

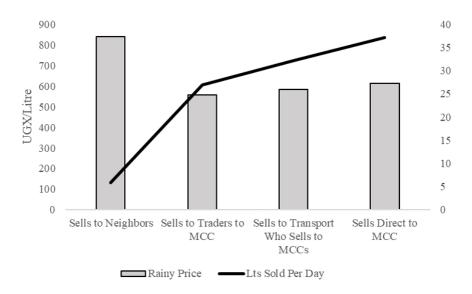
Figure 1: Dry Season Sales



Table 3: Rainy Season Sales

Sales	Direct Neighbor			Trad	ler to MC	C	Tran	sp to MC	С	Direct MCC		
	Mean	Sd	${\rm Obs}$	Mean	Sd	Obs	Mean	Sd	Obs	Mean	Sd	Obs
Local Cows	2.5	3.6	383	3.7	5.7	486	4.9	8.1	160	4.0	8.2	200
Local Cows Abv 8yrs	0.7	1.4	290	1.4	2.5	263	2.3	4.3	84	1.8	2.5	94
Local Cow Prod	3.5	2.5	297	3.2	2.4	277	3.6	3.2	88	4.6	5.5	96
Exotic Cows	0.9	1.9	382	5.5	5.8	484	8.0	8.4	159	7.6	8.3	199
Exotic Cows Abv 8yrs	0.3	0.9	145	1.2	2.2	388	2.0	4.3	136	1.7	3.1	164
Exotic Cows Prod	7.1	8.9	145	8.2	9.7	397	7.8	11.2	137	11.19	14.47	172
Price	840.8	255.4	146	556.5	168.6	398	582.8	180.7	137	612.5	194.1	165
Lowest Price	781.1	242.3	367	500.4	163.5	477	536.2	190.6	159	531.1	171.9	196
Highest Price	905.3	239.1	367	662.3	187.5	478	690.0	206.8	159	690.0	212.6	196
Avg Amt Sold Per Day	5.9	7.2	365	27.0	43.9	476	32.2	35.9	158	37.2	53.4	197
Avg Amt Consumed Per Day	2.4	1.5	366	4.2	1.8	477	4.5	2.0	156	4.8	2.1	196
Avg Amt Given Per Day	0.5	1.0	362	1.0	1.8	468	1.1	2.1	153	1.1	1.8	192
Avg Amt Fed To Calves Per Day	0.8	1.4	224	2.1	2.7	259	1.6	2.7	77	1.9	2.8	116
Avg Amt Processed Per Day	0.6	1.2	356	2.4	2.0	458	2.2	2.1	154	2.7	2.5	190
Avg Amt Milked Per Day	15.7	30.2	368	69.8	169.2	478	89.7	188.2	159	134.9	281.1	198
rainy_income	6434.8	7079.6	145	16564.7	25366.9	395	19838.2	20350.1	136	26236.7	42227.8	165

Figure 2: Rainy Season Sales



1.1.3. Recent Sales

Table 4: Sales

Sales	Dire	ct Neighb	or	Trader to MCC			Transp to MCC			Direct MCC		
	Mean	Sd	Obs	Mean	Sd	Obs	Mean	Sd	${\rm Obs}$	Mean	Sd	Obs
Number Transactions in Last 7 days	5.93	2.79	427	6.57	1.62	513	6.69	1.1	164	6.61	1.96	209
Number of Buyers	3.14	2.88	414	1.51	1.87	507	1.34	1.74	161	2.16	3.6	189
Price Received	906.81	215.8	433	515.84	166.35	142*	783.25	310.27	163	799.47	233.41	207
Liters Sold	32.14	142.29	428	51.24	140.36	510	65.07	176.25	161	82.27	201.88	209
HH Head Decided	0.86	0.35	423	0.95	0.21	499	0.99	0.11	159	0.98	0.14	205
Cash Payment	0.99	0.11	437	0.99	0.1	506	0.97	0.18	159	0.97	0.17	197
Payment Direct	0.34	0.48	435									
Payment Daily				0.01	0.11	507	0.01	0.08	163	0.01	0.12	208
Payment Weekly	0.18	0.39	435	0.65	0.48	507	0.6	0.49	163	0.44	0.5	208
Payment Monthly	0.03	0.16	435									
No Agreement	0.51	0.5	432	0.34	0.48	512	0.43	0.5	164	0.43	0.5	208
Years Selling to this customer	2.95	3.86	426	2.98	3.12	506	4.24	5.37	164	4	4.23	206
Never Rejected	0.74	0.44	386	0.74	0.44	479	0.67	0.47	159	0.5	0.5	202
Pay Premium	0.1	0.3	433	0.07	0.26	511	0.06	0.23	163	0.07	0.26	209
Assist With												
Training	0.15	0.35	96	0.13	0.34	70	0.08	0.28	25	0.34	0.48	68
Inputs	0.78	0.42	96	0.37	0.49	70	0.2	0.41	25	0.38	0.49	68
Credit	0.17	0.37	96	0.61	0.49	70	0.44	0.51	25	0.78	0.42	68
Uses Boda Boda				0.9	0.3	51	0.82	0.38	163	0.59	0.49	209
Jerry Can container				0.63	0.48	512	0.57	0.5	160	0.54	0.5	209
Farmer Paid Transport							2273.94	1548.58	137	2712.36	1195.86	182
Main Income Source Dairy	0.47		437	0.84		513	0.92		164	0.83		209

Notes. * Price for those who sold to traders who sell to MCCs was only collected in the SW milk shed.

Figure 3: Recent Prices

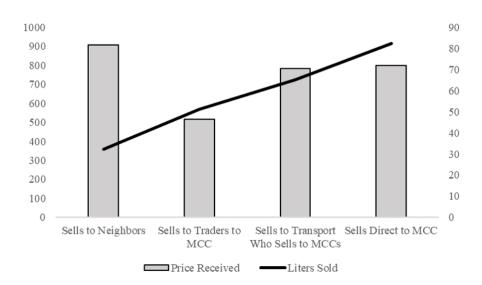
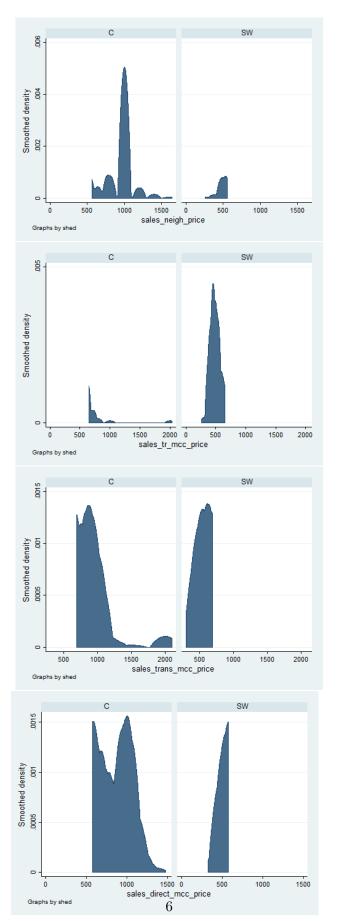


Figure 4: Recent Sales



1.2. Traders

Table 5: Type of Traders Sales

Sales	Trader Only			Trans	porter (Only	Trader and Transporter			
	Mean	Sd	${\rm Obs}$	Mean	Sd	${\rm Obs}$	Mean	Sd	Obs	
Private Collector	0.6	0.5	197	0.4	0.5	304	0.5	0.5	185	
Cooperative	0.3	0.5	197	0.4	0.5	304	0.4	0.5	185	
Processor	0.1	0.3	197	0.1	0.4	304	0.1	0.3	185	
Dry Price	1049.7	174.6	196	1062.3	181.2	288	1029.8	171.2	178	
Dry Liters	138.2	166.9	196	158.7	269.3	296	165.0	219.7	178	
Rain Price	660.9	185.8	201	685.5	203.7	300	681.5	214.8	184	
Rain Liters	257.0	294.3	200	234.7	258.4	304	277.1	327.9	185	
Cost Margin or Transp Charge	123.3	61.4	197	67.6	45.0	295				

Table 6: Traders Sales

Sales	Private Collector			Coe	operativ	re	Processor			
	Mean	Sd	${\rm Obs}$	Mean	Sd	Obs	Mean	Sd	Obs	
Main Buyer	0.50		686	0.39		686	0.11		686	
Dry Price	1040.8	183.2	325	1064.3	159.3	255	1036.8	203.8	72	
Dry Liters	166.1	290.5	328	149.1	152.8	258	132.1	146.4	74	
Rainy Price	663.0	201.7	338	688.5	200.5	261	688.2	201.0	76	
Rainy Liters	268.9	328.6	339	241.7	242.3	264	247.0	257.8	75	

Figure 5: Dry Season Sales

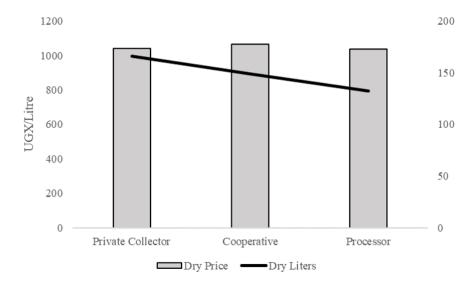


Figure 6: Rainy Season Sales

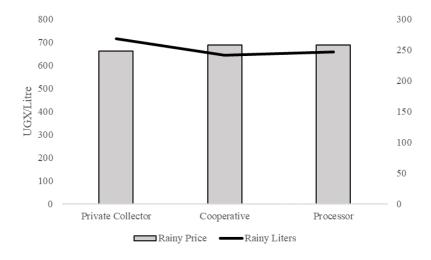


Figure 7: Boda vs Bike

