

Crop, fodder/food	WRS	WWH	WWB	WBA	WBE	WYB	WYB	TRB	SBB	SWB	OAB	MCB	MCC	MCW	GRO	GCR	GCR	GHP	GRP	CGR0	CONC	
Crop #	22	11	13	10	14	16	14	16	19	29	39	59	3	5	216	263	260	261	2520	252	2610	9999
<NUE/e>	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	1.05	0.83	1.33	11.68	0.44	0.81	-2.75	1.00
N digestibility, food/fodder crops	0.84	0.67	0.68	0.66	0.62	0.65	0.62	0.65	0.67	0.67	0.64	0.84	0.64	0.62	0.63	0.78	0.80	0.80	0.66	0.78	0.80	0.87
<NUE/e> addition before cereal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.04	0.11	29.21	0.00	0.00	-0.81	0.00
<NUE/e> addition from straw	0.09	0.07	0.07	0.08	0.11	0.10	0.08	0.10	0.08	0.05	0.07	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Recalculated N norm, kg N/ha	144	157	198	147	117	141	117	141	118	118	93	140	93	140	160	309	199	21	132	132	-87	

Crop, PPO/biodiesel/bioethanol	WRB	WWHB	WWBB	WBB	WYB	WYB	TRB	SBB	SWB	OAB	MCB	
Crop #	229	119	139	109	149	169	149	169	19	29	39	59
<NUE/e>	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
N digestibility, other crop parts	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.83
<NUE/e> addition before cereal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<NUE/e> addition from straw	0.09	0.07	0.07	0.08	0.11	0.10	0.08	0.10	0.08	0.05	0.07	0.00
Recalculated N norm, kg N/ha	144	157	198	147	117	141	117	141	118	118	93	140

<NUE/e> amounts from crop res	0.02	0.07	0.06	0.05	0.10	0.09	0.06	0.08	0.06	0.14	0.04	0.04	0.13	1.28	0.15	0.15	-0.30
<NUE/e> amounts from N fixation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	7.97	0.00	0.00	-2.70

Manure/ferti- lizer kind, #	None	0	1	2	2	2	2	3	3	3	3	3	4	4	4	4	5	5	6	6	71	72	None	None
Manure handling	None	None	Liquid	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	Deep	high N	low N	None	None
Manure+straw, relative	1.000	1.016	1.016	1.159	1.000	1.000	1.024	1.127	1.000	1.000	1.000	1.013	1.000	1.162	1.000	1.162	1.000	1.162	1.000	1.162	1.000	1.000	1.000	0
Vol/NH3 House	0.000	0.080	0.050	0.060	0.000	0.140	0.180	0.250	0.000	0.100	0.250	0.400	0.000	0.150	0.000	0.150	0.000	0.450	0.450	0.450	0.000	0.000	0.000	0
Vol/NH3 Store	0.000	0.022	0.085	0.300	0.000	0.027	0.214	0.400	0.000	0.020	0.150	0.175	0.000	0.150	0.000	0.150	0.000	0.484	0.484	0.484	0.933	0.533	0.000	0
% use of field store				20			70					85												
Vol/NH3 Field	0.000	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.070	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0
N efficiency	0.000	0.700	0.650	0.450	0.750	0.650	0.650	0.650	0.650	0.650	0.650	0.650	0.650	0.650	0.450	0.450	0.450	0.450	0.450	0.450	0.700	0.400	0.400	0
N-Vol/NH3 efficiency	1.022	0.933	0.867	0.600	0.484	1.000	0.867	0.867	0.699	0.867	0.867	0.600	0.600	0.484	0.600	0.484	0.600	0.484	0.600	0.484	0.933	0.533	0.000	0

Use Kind	Waste moved in field	Cattle Dairy	Cattle Beef	Pig Pork	Poultry Meat	Poultry Eggs	Sheep Milk/mutton	Goat Milk/meat	N crop high N	N crop low N	Food/beverage	Fuel/other
#	-1	0	21	32	42	43	51	61	71	72	8	9
Fodder to food	N eff	0.264	0.227	0.418	0.510	0.241	0.142	0.096	0.096	0.096	0.096	0.096
Fodder to food	N eff	0.264	0.146	0.269	0.328	0.272	0.142	0.096	0.096	0.096	0.096	0.096
Fodder to food	ND eff	0.351	0.310									
Fodder to food	ND eff	0.351	0.199									

Ratios of N2O-N to N according to Fertilizer/manure	IPCC 1996 (current inventories)	IPCC 2006 (newest values, not yet used for inventories)
Handling/Slurry and liquid manure	N Animal Green	N Animal Green
house/store	0 0.0010	0 0.0050
Solid manure and deep litter	0 0.0200	0 0.0050
Application/field	0.0125 0.0125 0.0125	0.0100 0.0100 0.0100
Grazing cattle, rooting pigs, craping poultry	0 0.0200	0 0.0200
Grazing, others	0 0.0200	0 0.0100
Volatilisation/NH3	0.0100 0.0100 0.0100	0.0100 0.0100 0.0100
Crop residues	0 0.0000	0 0.0000
N fixing crops	0 0.0000	0 0.0000
Leaching	0.0250 0.0250 0.0250	0.0075 0.0075 0.0075

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE CATTLE DAIRY Note 43  
 AND CONTINUING WITH LIQUID CATTLE MANURE TO PRODUCE CATTLE DAIRY Note 43

Year Fertilizer/manure Or- Nnorm Crop Crop Straw Cereal Fuel/ Fuel/ N2O-N emission N2O-N emission  
 # Store Amounts ganic propor # use & benefit used other other IPCC 1996 IPCC 2006  
 Name 1/0 Store Field 1/0 1/0 Name 1/0 leach 1/0 1/0 Name Fed Food #72 #8 #9 # Name mounts Each Total Each Total

Total N	RATIO OF N2O-N TO N IN FIRST CROP TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED												
Year N NH3	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3												
1-10 N leach	TOTAL N AMOUNTS IN KG AND % LEACHED												
	TOTAL N AMOUNTS IN KG AND %												
	TOTAL N AMOUNTS IN KG AND %												

N2O-N in food/beverage/fuel/other

Year N	1	0	100.0	100.0	0	100	229	1	0	97.8	21	40.0	11.8	0.0	0.0	0.0	28.2	1.38	2.87	1.24	3.71	1.74	3.71	1.57	2.25
1	Vol/NH3	N	NO	2.2	NON	100.00	WRB	1.000	NO	57.8	Cattle	0.84	0.84	0.0	0.0	0.0	2.3	0.04	0.125	0.04	0.125	0.13	0.13	0.13	0.13
	N leach			1.022	1.000	1.00	1.000	0.591	0.0	57.8	Dairy	2	2	10.9	Liquid	0.0	2.3	1.45	0.0010	0.43	0.0050	0.43	0.0050	0.43	0.0050
Year N	2	21	0	26.4	0	100	11	0	0	19.8	21	7.4	1.7	0.0	0.0	0.0	5.6	0.29	0.67	0.26	0.67	1.83	1.83	0.55	0.55
2	Vol/NH3	Cattle	NO	6.6	NON	100.00	WWH	1.000	NO	12.4	Cattle	0.67	0.67	0.0	0.0	0.0	0.5	0.07	0.125	0.07	0.125	0.07	0.125	0.07	0.1000
	N leach	Liquid		0.933	1.016	1.00	1.000	0.627	0.0	12.4	Dairy	2	2	2.7	Liquid	0.0	0.5	0.31	0.0010	0.09	0.0050	0.09	0.0050	0.09	0.0050
Year N	3	21	0	5.3	0	100	11	0	0	4.0	21	1.5	0.3	0.0	0.0	0.0	1.1	0.06	0.13	0.05	0.13	0.05	0.13	0.05	0.08
3	Vol/NH3	Cattle	NO	1.3	NON	100.00	WWH	1.000	NO	2.5	Cattle	0.67	0.67	0.0	0.0	0.0	0.1	0.01	0.125	0.01	0.125	0.01	0.125	0.01	0.1000
	N leach	Liquid		0.933	1.016	1.00	1.000	0.627	0.0	2.5	Dairy	2	2	0.5	Liquid	0.0	0.0	0.06	0.0010	0.02	0.0050	0.02	0.0050	0.02	0.0050
Year N	4	21	0	1.1	0	100	1	0	0	0.8	21	0.3	0.1	0.0	0.0	0.0	0.2	0.01	0.03	0.01	0.03	0.01	0.03	0.01	0.02
4	Vol/NH3	Cattle	NO	0.3	NON	100.00	SBA	1.000	NO	0.5	Cattle	0.65	0.65	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.125	0.00	0.125	0.00	0.1000
	N leach	Liquid		0.933	1.016	1.00	1.000	0.627	0.0	0.5	Dairy	2	2	0.1	Liquid	0.0	0.0	0.01	0.0010	0.00	0.0050	0.00	0.0050	0.00	0.0050
Year N	5	21	0	0.2	0	100	10	0	0	0.2	21	0.1	0.0	0.0	0.0	0.0	0.0	0.00	0.01	0.00	0.01	0.00	0.01	0.00	0.00
5	Vol/NH3	Cattle	NO	0.1	NON	100.00	WBA	1.000	NO	0.1	Cattle	0.66	0.66	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.125	0.00	0.125	0.00	0.1000
	N leach	Liquid		0.933	1.016	1.00	1.000	0.627	0.0	0.1	Dairy	2	2	0.0	Liquid	0.0	0.0	0.00	0.0010	0.00	0.0050	0.00	0.0050	0.00	0.0050
Year N	6	21	0	0.0	0	100	229	1	0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	Vol/NH3	Cattle	NO	0.0	NON	100.00	WRB	1.000	NO	0.0	Cattle	0.84	0.84	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.125	0.00	0.125	0.00	0.1000
	N leach	Liquid		0.933	1.016	1.00	1.000	0.627	0.0	0.0	Dairy	2	2	0.0	Liquid	0.0	0.0	0.00	0.0010	0.00	0.0050	0.00	0.0050	0.00	0.0050
Year N	7	21	0	0.0	0	100	11	0	0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	Vol/NH3	Cattle	NO	0.0	NON	100.00	WWH	1.000	NO	0.0	Cattle	0.67	0.67	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.125	0.00	0.125	0.00	0.1000
	N leach	Liquid		0.933	1.016	1.00	1.000	0.627	0.0	0.0	Dairy	2	2	0.0	Liquid	0.0	0.0	0.00	0.0010	0.00	0.0050	0.00	0.0050	0.00	0.0050
Year N	8	21	0	0.0	0	100	11	0	0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Vol/NH3	Cattle	NO	0.0	NON	100.00	WWH	1.000	NO	0.0	Cattle	0.67	0.67	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.125	0.00	0.125	0.00	0.1000
	N leach	Liquid		0.933	1.016	1.00	1.000	0.627	0.0	0.0	Dairy	2	2	0.0	Liquid	0.0	0.0	0.00	0.0010	0.00	0.0050	0.00	0.0050	0.00	0.0050
Year N	9	21	0	0.0	0	100	1	0	0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	Vol/NH3	Cattle	NO	0.0	NON	100.00	SBA	1.000	NO	0.0	Cattle	0.65	0.65	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.125	0.00	0.125	0.00	0.1000
	N leach	Liquid		0.933	1.016	1.00	1.000	0.627	0.0	0.0	Dairy	2	2	0.0	Liquid	0.0	0.0	0.00	0.0010	0.00	0.0050	0.00	0.0050	0.00	0.0050
Year N	10	21	0	0.0	0	100	10	0	0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	Vol/NH3	Cattle	NO	0.0	NON	100.00	WBA	1.000	NO	0.0	Cattle	0.66	0.66	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.125	0.00	0.125	0.00	0.1000
	N leach	Liquid		0.933	1.016	1.00	1.000	0.627	0.0	0.0	Dairy	2	2	0.0	Liquid	0.0	0.0	0.00	0.0010	0.00	0.0050	0.00	0.0050	0.00	0.0050

Year Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9 Year 10 Total Total/year 1

Area with crop, ha 0.69 0.15 0.03 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.89 1.28 Note 50

Possible additional non IPCC N2O-N emissions Value  
 N residues emissions, ratio of N2O-N to N: 0.0000  
 Increased soil N emissions, kg N2O-N/ha: 0.00  
 Natural background emissions, kg N2O-N/ha: 1.00

Total IPCC and non IPCC N2O  
 3.71  
 3.71  
 4.59

Kind of source  
 0.00 Current crops  
 0.00 Total anthropogenic  
 0.89 Total including natural

Note 51  
 2.25 Note 51  
 2.25 Note 51  
 3.13 Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE CATTLE DAIRY Note 43  
 AND CONTINUING WITH SEPARATED CATTLE MANURE TO PRODUCE CATTLE DAIRY Note 43

Year Fertilizer/manure Or- Nnorm Crop Straw Cereal Crop Fuel/ Fuel/ N2O-N emission N2O-N emission  
 # Store Amounts ganic propor # use & benefit use #71/ bev other IPCC 1996 IPCC 2006  
 Name 1/0 Store Field 1/0 1/0 1/0 1/0 leach 1/0 1/0 1/0 #72 #8 #9 # Name mounts Each Total Each Total

Total N	RATIO OF N2O-N TO N IN FIRST CROP TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED													
Year N NH3	IPCC 1996 IPCC 2006													
1-10 N leach	FIRST YEAR 0.0780 0.0429													
TOTAL	TOTAL N AMOUNTS IN KG AND % LEACHED 0.1012 0.0564													

N2O-N in food/beverage/fuel/other 0.2918

Year N	1	0	100.0	100.0	0	100	229	1	0	97.8	21	40.0	11.8	0.0	0.0	0.0	28.2	13.8	2.07	4.05	1.58	2.26
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WRB	1.000	NO	57.8	Cattle	0.84	0.0	0.0	0.0	1.4	12.4	0.12	3.12	1.25	1.72
	N leach			1.022	1.000	ORG	1.00	1.000	0.591	0.0	57.8	Dairy	2	10.9	10.9	0.0	0.0	12.3	0.12	0.04	0.04	0.0100
Year N	2	0	27.2	27.2	0	100	11	0	0	20.4	21	7.1	1.7	0.0	0.0	0.0	5.4	73.9	1.86	4.05	0.56	2.26
2	Vol/NH3	Cattle	NO	0.0	6.8	NON	100.00	WWH	1.000	NO	13.3	Cattle	0.67	0.0	0.0	0.0	0.3	73.9	1.86	3.12	1.25	1.72
	N leach	Sep		1.016	1.000	ORG	1.00	1.000	0.653	0.0	13.3	Dairy	2	2.8	2.8	0.0	0.0	73.9	1.86	0.04	0.04	0.0100
Year N	3	0	5.2	5.2	0	100	11	0	0	3.9	21	1.4	0.3	0.0	0.0	0.0	1.0	100.0	2.07	4.05	1.58	2.26
3	Vol/NH3	Cattle	NO	0.0	1.3	NON	100.00	WWH	1.000	NO	2.6	Cattle	0.67	0.0	0.0	0.0	0.1	100.0	2.07	4.05	1.58	2.26
	N leach	Sep		1.016	1.000	ORG	1.00	1.000	0.653	0.0	2.6	Dairy	2	0.5	0.5	0.0	0.0	100.0	2.07	4.05	1.58	2.26
Year N	4	0	1.0	1.0	0	100	1	0	0	0.8	21	0.3	0.1	0.0	0.0	0.0	0.2	100.0	2.07	4.05	1.58	2.26
4	Vol/NH3	Cattle	NO	0.0	0.3	NON	100.00	SBA	1.000	NO	0.5	Cattle	0.65	0.0	0.0	0.0	0.0	100.0	2.07	4.05	1.58	2.26
	N leach	Sep		1.016	1.000	ORG	1.00	1.000	0.653	0.0	0.5	Dairy	2	0.1	0.1	0.0	0.0	100.0	2.07	4.05	1.58	2.26
Year N	5	0	0.2	0.2	0	100	10	0	0	0.1	21	0.1	0.0	0.0	0.0	0.0	0.0	100.0	2.07	4.05	1.58	2.26
5	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WBA	1.000	NO	0.1	Cattle	0.66	0.0	0.0	0.0	0.0	100.0	2.07	4.05	1.58	2.26
	N leach	Sep		1.016	1.000	ORG	1.00	1.000	0.653	0.0	0.1	Dairy	2	0.0	0.0	0.0	0.0	100.0	2.07	4.05	1.58	2.26
Year N	6	0	0.0	0.0	0	100	229	1	0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2.07	4.05	1.58	2.26
6	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WRB	1.000	NO	0.0	Cattle	0.84	0.0	0.0	0.0	0.0	100.0	2.07	4.05	1.58	2.26
	N leach	Sep		1.016	1.000	ORG	1.00	1.000	0.653	0.0	0.0	Dairy	2	0.0	0.0	0.0	0.0	100.0	2.07	4.05	1.58	2.26
Year N	7	0	0.0	0.0	0	100	11	0	0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2.07	4.05	1.58	2.26
7	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Cattle	0.67	0.0	0.0	0.0	0.0	100.0	2.07	4.05	1.58	2.26
	N leach	Sep		1.016	1.000	ORG	1.00	1.000	0.653	0.0	0.0	Dairy	2	0.0	0.0	0.0	0.0	100.0	2.07	4.05	1.58	2.26
Year N	8	0	0.0	0.0	0	100	11	0	0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2.07	4.05	1.58	2.26
8	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Cattle	0.67	0.0	0.0	0.0	0.0	100.0	2.07	4.05	1.58	2.26
	N leach	Sep		1.016	1.000	ORG	1.00	1.000	0.653	0.0	0.0	Dairy	2	0.0	0.0	0.0	0.0	100.0	2.07	4.05	1.58	2.26
Year N	9	0	0.0	0.0	0	100	1	0	0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2.07	4.05	1.58	2.26
9	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	SBA	1.000	NO	0.0	Cattle	0.65	0.0	0.0	0.0	0.0	100.0	2.07	4.05	1.58	2.26
	N leach	Sep		1.016	1.000	ORG	1.00	1.000	0.653	0.0	0.0	Dairy	2	0.0	0.0	0.0	0.0	100.0	2.07	4.05	1.58	2.26
Year N	10	0	0.0	0.0	0	100	10	0	0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	100.0	2.07	4.05	1.58	2.26
10	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Cattle	0.66	0.0	0.0	0.0	0.0	100.0	2.07	4.05	1.58	2.26
	N leach	Sep		1.016	1.000	ORG	1.00	1.000	0.653	0.0	0.0	Dairy	2	0.0	0.0	0.0	0.0	100.0	2.07	4.05	1.58	2.26

Year Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9 Year 10 Total Total/year 1

Area with crop, ha 0.69 0.15 0.03 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.88 1.26

Possible additional non IPCC N2O-N emissions Value  
 N residues emissions, ratio of N2O-N to N: 0.0000  
 Increased soil N emissions, kg N2O-N/ha: 0.00  
 Natural background emissions, kg N2O-N/ha: 1.00

Total IPCC and non IPCC N2O  
 4.05  
 4.05  
 4.92

Kind of source  
 Current crops  
 Total anthropogenic  
 Total including natural

Note 51  
 Note 51  
 Note 51  
 Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE TO PRODUCE  
 AND CONTINUING WITH CATTLE DEEP LITTER TO PRODUCE WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR CATTLE DAIRY CATTLE DAIRY

Year	Fertilizer/manure #	Store Name	Amounts 1/0	Field 1/0	Or-ganic 1/0	Nnorm propor-tion, %	Crop #	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use #	Food Fed	N crop #71/ #72	Fuel/ bev #8	Fuel/ other #9	Manure handling #	Final N a-mounts	N2O-N emission IPCC 1996	N2O-N emission IPCC 2006			
Total N	1	0	100.0	100.0	2.2 NON	100.00	WRB	1.000	NO	1	0	97.8	21	40.0	11.8	0.0	23	28.2	2.37	4.46	1.59	2.31
Year 1-10 N leach	0	0	0.0	0.0	0.591	1.000	WRB	0.591	NO	0	0	57.8	2	0.84	10.9	0.0	0	1.7	0.13	0.13	0.13	0.13
Year 2 N leach	0	0	30.7	30.7	7.7 NON	100.00	WWH	1.000	NO	0	0	23.0	21	5.5	1.3	0.0	23	4.2	1.45	0.200	0.43	0.0050
Year 3 N leach	0	0	1.159	1.159	4.6	1.000	WWH	0.760	0	0	0	17.5	2	0.67	3.1	0.0	0	0.3	0.08	0.125	0.08	0.0100
Year 4 N leach	0	0	4.6	4.6	1.2 NON	100.00	WWH	1.000	NO	0	0	3.5	21	0.8	0.2	0.0	23	0.6	0.06	0.14	0.04	0.07
Year 5 N leach	0	0	1.159	1.159	0.7	1.000	SBA	0.760	0	0	0	2.6	2	0.67	0.5	0.0	0	0.0	0.01	0.125	0.01	0.0100
Year 6 N leach	0	0	0.7	0.7	0.2 NON	100.00	SBA	1.000	NO	0	0	0.5	21	0.1	0.0	0.0	23	0.1	0.00	0.02	0.01	0.01
Year 7 N leach	0	0	1.159	1.159	0.1	1.000	WBA	0.760	0	0	0	0.4	2	0.65	0.1	0.0	0	0.0	0.01	0.125	0.00	0.0100
Year 8 N leach	0	0	0.1	0.1	0.0 NON	100.00	WBA	1.000	NO	0	0	0.1	21	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.00
Year 9 N leach	0	0	0.0	0.0	0.0 NON	100.00	WBA	0.760	0	0	0	0.1	2	0.66	0.0	0.0	0	0.0	0.00	0.125	0.00	0.0050
Year 10 N leach	0	0	1.159	1.159	0.0 NON	100.00	WRB	1.000	NO	1	0	0.0	21	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.00
Year 1 N leach	0	0	0.0	0.0	0.0 NON	100.00	WRB	0.760	0	0	0	0.0	2	0.84	0.0	0.0	0	0.0	0.00	0.125	0.00	0.0050
Year 2 N leach	0	0	0.0	0.0	0.0 NON	100.00	WWH	1.000	NO	0	0	0.0	21	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.00
Year 3 N leach	0	0	1.159	1.159	0.0 NON	100.00	WWH	0.760	0	0	0	0.0	2	0.67	0.0	0.0	0	0.0	0.00	0.125	0.00	0.0050
Year 4 N leach	0	0	0.0	0.0	0.0 NON	100.00	WBA	1.000	NO	0	0	0.0	21	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.00
Year 5 N leach	0	0	0.0	0.0	0.0 NON	100.00	WBA	0.760	0	0	0	0.0	2	0.67	0.0	0.0	0	0.0	0.00	0.125	0.00	0.0050
Year 6 N leach	0	0	1.159	1.159	0.0 NON	100.00	WRB	1.000	NO	0	0	0.0	21	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.00
Year 7 N leach	0	0	0.0	0.0	0.0 NON	100.00	WWH	0.760	0	0	0	0.0	2	0.67	0.0	0.0	0	0.0	0.00	0.125	0.00	0.0050
Year 8 N leach	0	0	0.0	0.0	0.0 NON	100.00	WBA	1.000	NO	0	0	0.0	21	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.00
Year 9 N leach	0	0	1.159	1.159	0.0 NON	100.00	WBA	0.760	0	0	0	0.0	2	0.66	0.0	0.0	0	0.0	0.00	0.125	0.00	0.0050
Year 10 N leach	0	0	0.600	0.600	0.0 NON	100.00	WBA	0.760	0	0	0	0.0	2	0.66	0.0	0.0	0	0.0	0.00	0.125	0.00	0.0050

RATIO OF N2O-N TO N IN FIRST CROP		TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	
Year	N/NH3	IPCC 1996	IPCC 2006
1-10	N leach	0.0843	0.0430
TOTAL		0.1115	0.0577

N2O-N in food/beverage/fuel/other

Year	N	Vol/NH3	N	100.0	100.0	WRB	229	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total	Total/year 1
Year 1	N leach	1.022	1.000	2.2 NON	100.00	WRB	1.000	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	1.20
Year 2	N leach	0	30.7	30.7	7.7 NON	100.00	WWH	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	1.20
Year 3	N leach	0	1.159	1.159	4.6	1.000	WWH	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	1.20
Year 4	N leach	0	1.159	1.159	1.2 NON	100.00	WWH	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	1.20
Year 5	N leach	0	0.7	0.7	0.2 NON	100.00	SBA	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	1.20
Year 6	N leach	0	1.159	1.159	0.1	1.000	WBA	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	1.20
Year 7	N leach	0	0.0	0.0	0.0 NON	100.00	WBA	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	1.20
Year 8	N leach	0	1.159	1.159	0.0 NON	100.00	WRB	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	1.20
Year 9	N leach	0	0.0	0.0	0.0 NON	100.00	WWH	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	1.20
Year 10	N leach	0	0.600	0.600	0.0 NON	100.00	WBA	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.83	1.20

Year

Area with crop, ha

Possible additional non IPCC N2O-N emissions  
 N residues emissions, ratio of N2O-N to N: 0.0000  
 Increased soil N emissions, kg N2O-N/ha: 0.00  
 Natural background emissions, kg N2O-N/ha: 1.00

Total IPCC and non IPCC N2O: 4.46  
 2.31 Note 51  
 2.31 Note 51  
 3.14 Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE CATTLE DAIRY Note 43  
 AND CONTINUING WITH MANURE FROM GRAZING CATTLE TO PRODUCE CATTLE DAIRY Note 43

Year Fertilizer/manure N crop Fuel/ Manure Final N2O-N emission  
 # Store Amounts #71/ bev other handling N a- IPCC 1996  
 Name 1/0 Store Field 1/0 Name # Name #21-61 Food #72 #8 #9 # Name mounts Each Total Each Total

Total N	RATIO OF N2O-N TO N IN FIRST CROP TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED													
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3										13.2	13.2
1-10 N leach	0.0847	0.0533	TOTAL N AMOUNTS IN KG AND % LEACHED										4.5	4.5
TOTAL	0.1137	0.0697	TOTAL N AMOUNTS IN KG AND %										82.3	82.3

N2O-N in food/beverage/fuel/other 0.3447 0.2112 Note 46

Year N	1	0	100.0	100.0	1	0	97.8	21	40.0	11.8	0.0	0.0	0.0	24	28.2	1.92	3.39	1.68	2.13	Note 47
1	Vol/NH3	N	NO	0.0	1.000	NO	57.8	Cattle	0.84	0.0	0.0	0.0	0.0	Cattle	0.0	0.02	0.125	0.02	0.100	Note 48
N leach	1.022	1.000	ORG	1.00	1.000	0.0	57.8	Dairy	2	10.9	Graz	0.0	10.9	Graz	0.0	1.45	0.0200	0.43	0.0200	Note 49
Year 2	Vol/NH3	Cattle	NO	0.0	1.000	NO	26.2	0	5.1	1.2	0.0	0.0	0.0	24	3.9	0.45	1.00	0.38	0.56	Note 47
N leach	Graz	0.484	1.000	ORG	1.00	1.000	21.1	Cattle	0.67	0.0	0.0	0.0	0.0	Cattle	0.0	0.02	0.125	0.02	0.100	Note 48
Year 3	Vol/NH3	Cattle	NO	0.0	1.000	NO	3.6	0	0.7	0.2	0.0	0.0	0.0	24	0.5	0.06	0.14	0.05	0.08	Note 47
N leach	Graz	0.484	1.000	ORG	1.00	1.000	2.9	Cattle	0.67	0.0	0.0	0.0	0.0	Cattle	0.0	0.00	0.0125	0.00	0.100	Note 48
Year 4	Vol/NH3	Cattle	NO	0.0	1.000	NO	0.5	0	0.1	0.0	0.0	0.0	0.0	24	0.1	0.01	0.02	0.01	0.01	Note 47
N leach	Graz	0.484	1.000	ORG	1.00	1.000	0.4	Cattle	0.65	0.0	0.0	0.0	0.0	Cattle	0.0	0.00	0.0125	0.00	0.100	Note 48
Year 5	Vol/NH3	Cattle	NO	0.0	1.000	NO	0.1	0	0.0	0.0	0.0	0.0	0.0	24	0.0	0.00	0.00	0.00	0.00	Note 47
N leach	Graz	0.484	1.000	ORG	1.00	1.000	0.1	Dairy	0.66	0.0	0.0	0.0	0.0	Cattle	0.0	0.00	0.0125	0.00	0.100	Note 48
Year 6	Vol/NH3	Cattle	NO	0.0	1.000	NO	0.0	0	0.0	0.0	0.0	0.0	0.0	24	0.0	0.00	0.00	0.00	0.00	Note 47
N leach	Graz	0.484	1.000	ORG	1.00	1.000	0.1	Dairy	2	0.0	0.0	0.0	0.0	Graz	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year 7	Vol/NH3	Cattle	NO	0.0	1.000	NO	0.0	0	0.0	0.0	0.0	0.0	0.0	24	0.0	0.00	0.0125	0.00	0.100	Note 48
N leach	Graz	0.484	1.000	ORG	1.00	1.000	0.0	Dairy	2	0.0	0.0	0.0	0.0	Graz	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year 8	Vol/NH3	Cattle	NO	0.0	1.000	NO	0.0	0	0.0	0.0	0.0	0.0	0.0	24	0.0	0.00	0.0125	0.00	0.100	Note 48
N leach	Graz	0.484	1.000	ORG	1.00	1.000	0.0	Dairy	2	0.0	0.0	0.0	0.0	Graz	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year 9	Vol/NH3	Cattle	NO	0.0	1.000	NO	0.0	0	0.0	0.0	0.0	0.0	0.0	24	0.0	0.00	0.00	0.00	0.00	Note 47
N leach	Graz	0.484	1.000	ORG	1.00	1.000	0.0	Dairy	2	0.0	0.0	0.0	0.0	Graz	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year 10	Vol/NH3	Cattle	NO	0.0	1.000	NO	0.0	0	0.0	0.0	0.0	0.0	0.0	24	0.0	0.00	0.00	0.00	0.00	Note 47
N leach	Graz	0.484	1.000	ORG	1.00	1.000	0.0	Dairy	2	0.0	0.0	0.0	0.0	Cattle	0.0	0.00	0.0125	0.00	0.100	Note 48
TOTAL	0.484	1.000	ORG	1.00	1.000	0.0	0.0	Dairy	2	0.0	0.0	0.0	0.0	Graz	0.0	0.00	0.0200	0.00	0.0200	Note 49

Year Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9 Year 10 Total Total/year 1

Area with crop, ha 0.69 0.08 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.79 1.14 Note 50

Possible additional non IPCC N2O-N emissions Value  
 N residues emissions, ratio of N2O-N to N: 0.0000  
 Increased soil N emissions, kg N2O-N/ha: 0.00  
 Natural background emissions, kg N2O-N/ha: 1.00  
 Total IPCC and non IPCC N2O 4.55  
 Total anthropogenic 4.55  
 Total including natural 5.34  
 Note 51  
 Note 51  
 Note 51  
 Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE CATTLE BEEF  
 AND CONTINUING WITH LIQUID CATTLE MANURE TO PRODUCE CATTLE BEEF

Year Fertilizer/manure Or- Nnorm Crop Straw Cereal Fuel/ Manure Final N2O-N emission  
 # Store Amounts ganic propor # use & benefit used other handling N a- IPCC 1996  
 Name 1/0 Store Field 1/0 Name 1/0 leach 1/0 1/0 1/0 Name Fed Uses #21-61 #71/ bev #8 #9 # Name mounts Each Total Each Total

Total N	RATIO OF N2O-N TO N IN FIRST CROP										TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED										
Year N NH3	IPCC 1996					IPCC 2006					TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3					TOTAL N AMOUNTS IN KG AND % LEACHED					
1-10 N leach	0.0719	0.0432	0.0572	0.0940	0.0572	1.000	NO	1.000	NO	1.000	NO	1.000	NO	1.000	NO	12.4	12.4	1.76	3.76	1.59	2.29
TOTAL	0.0940	0.0572	0.0572	0.0940	0.0572	1.000	NO	1.000	NO	1.000	NO	1.000	NO	1.000	NO	100.5	100.0	1.86	0.56	0.14	0.14

N2O-N in food/beverage/fuel/other

Year N	1	0	100.0	100.0	0	100	229	1	0	97.8	22	40.0	10.4	0.0	0.0	0.0	0.0	0.0	21	29.6	1.25	2.88
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WRB	1.000	NO	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	2.4	0.05	0.125
N leach	1.022	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.591	0.0	57.8	Beef	2	10.9	Liquid	2	10.9	Liquid	2	2.4	0.05	0.125
Year N	21	0	27.7	27.7	0	100	11	0	0	20.7	22	7.7	1.6	0.0	0.0	0.0	0.0	0.0	21	6.1	0.27	0.70
2	Vol/NH3	Cattle	NO	0.0	6.9	NON	100.00	WWH	1.000	NO	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.5	0.07	0.125
N leach	0.933	1.016	1.016	1.016	1.016	1.016	1.016	1.016	0.627	0.0	13.0	Beef	2	2.8	Liquid	2	2.8	Liquid	2	0.5	0.07	0.125
Year N	21	0	5.7	5.7	0	100	11	0	0	4.3	22	1.6	0.3	0.0	0.0	0.0	0.0	0.0	21	1.3	0.06	0.15
3	Vol/NH3	Cattle	NO	0.0	1.4	NON	100.00	WWH	1.000	NO	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.1	0.02	0.125
N leach	0.933	1.016	1.016	1.016	1.016	1.016	1.016	1.016	0.627	0.0	2.7	Beef	2	0.6	Liquid	2	0.6	Liquid	2	0.1	0.02	0.125
Year N	21	0	1.2	1.2	0	100	1	0	0	0.9	22	0.3	0.1	0.0	0.0	0.0	0.0	0.0	21	0.3	0.01	0.03
4	Vol/NH3	Cattle	NO	0.0	0.3	NON	100.00	SBA	1.000	NO	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.0	0.00	0.0125
N leach	0.933	1.016	1.016	1.016	1.016	1.016	1.016	1.016	0.627	0.0	0.6	Beef	2	0.1	Liquid	2	0.1	Liquid	2	0.0	0.00	0.0125
Year N	21	0	0.2	0.2	0	100	10	0	0	0.2	22	0.1	0.0	0.0	0.0	0.0	0.0	0.0	21	0.1	0.00	0.01
5	Vol/NH3	Cattle	NO	0.0	0.1	NON	100.00	WBA	1.000	NO	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.0	0.00	0.0125
N leach	0.933	1.016	1.016	1.016	1.016	1.016	1.016	1.016	0.627	0.0	0.1	Beef	2	0.0	Liquid	2	0.0	Liquid	2	0.0	0.00	0.0125
Year N	21	0	0.1	0.1	0	100	229	1	0	0.1	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00
6	Vol/NH3	Cattle	NO	0.0	0.1	NON	100.00	WRB	1.000	NO	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.0	0.00	0.0125
N leach	0.933	1.016	1.016	1.016	1.016	1.016	1.016	1.016	0.627	0.0	0.0	Beef	2	0.0	Liquid	2	0.0	Liquid	2	0.0	0.00	0.0125
Year N	21	0	0.0	0.0	0	100	11	0	0	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00
7	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	NO	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.0	0.00	0.0125
N leach	0.933	1.016	1.016	1.016	1.016	1.016	1.016	1.016	0.627	0.0	0.0	Beef	2	0.0	Liquid	2	0.0	Liquid	2	0.0	0.00	0.0125
Year N	21	0	0.0	0.0	0	100	11	0	0	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00
8	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	NO	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.0	0.00	0.0125
N leach	0.933	1.016	1.016	1.016	1.016	1.016	1.016	1.016	0.627	0.0	0.0	Beef	2	0.0	Liquid	2	0.0	Liquid	2	0.0	0.00	0.0125
Year N	21	0	0.0	0.0	0	100	1	0	0	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00
9	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	SBA	1.000	NO	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.0	0.00	0.0125
N leach	0.933	1.016	1.016	1.016	1.016	1.016	1.016	1.016	0.627	0.0	0.0	Beef	2	0.0	Liquid	2	0.0	Liquid	2	0.0	0.00	0.0125
Year N	21	0	0.0	0.0	0	100	10	0	0	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00
10	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WBA	1.000	NO	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.0	0.00	0.0125
N leach	0.933	1.016	1.016	1.016	1.016	1.016	1.016	1.016	0.627	0.0	0.0	Beef	2	0.0	Liquid	2	0.0	Liquid	2	0.0	0.00	0.0125

Year Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9 Year 10 Total Total/year 1

Area with crop, ha 0.69 0.16 0.03 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.90 1.30

Possible additional non IPCC N2O-N emissions Value 0.0000  
 N residues emissions, ratio of N2O-N to N: 0.00  
 Increased soil N emissions, kg N2O-N/ha: 1.00  
 Natural background emissions, kg N2O-N/ha: 0.69

Total IPCC and non IPCC N2O 3.76  
 Total anthropogenic 3.76  
 Total including natural 4.66

Kind of source  
 Current crops 0.00  
 Total anthropogenic 0.00  
 Total including natural 0.90

Note 43  
 Note 43  
 Note 44  
 Note 44  
 Note 44  
 Note 45  
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 Note 46  
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 Note 51  
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 Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE CATTLE BEEF Note 43  
 AND CONTINUING WITH SEPARATED CATTLE MANURE TO PRODUCE CATTLE BEEF Note 43

Year Fertilizer/manure Or- Nnorm Crop Straw Cereal Fuel/ Manure Final N2O-N emission  
 # Store Amounts ganic propor # use & benefit used other handling N a- IPCC 1996  
 Name 1/0 Store Field 1/0 Name 1/0 Name # leach 1/0 1/0 1/0 #9 #71/ bev #8 #72 Food # Name mounts Each Total Each Total

Total N		RATIO OF N2O-N TO N IN FIRST CROP										TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED			
Year	N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3										12.3	12.3
1-10	N leach	0.0784	0.0431	TOTAL N AMOUNTS IN KG AND % LEACHED										13.0	12.9
		0.1030	0.0574	TOTAL N AMOUNTS IN KG AND %										75.3	74.8
														100.6	100.0

N2O-N in food/beverage/fuel/other 0.3339 0.1862 Note 46

Year	N	1	0	100.0	100.0	1	0	97.8	22	40.0	10.4	0.0	0.0	0.0	0.0	22	29.6	1.65	3.14	1.25	3.14	1.25	1.73	Note 47
1	Vol/NH3	N	NO	2.2	NON	100.00	WRB	1.000	NO	0.84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.04	0.0125	0.04	0.0125	0.04	0.0100	Note 48
	N leach	1.022	1.000	0.591	0.0	57.8	Beef	2	10.9	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.45	0.0105	0.43	0.0105	0.43	0.0050	Note 49
Year	N	22	0	28.6	0	100	11	21.4	22	7.4	1.5	0.0	0.0	0.0	0.0	22	5.9	0.36	0.79	0.28	0.79	0.28	0.46	Note 47
2	Vol/NH3	Cattle	NO	7.1	NON	100.00	WWH	1.000	NO	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0125	0.07	0.0125	0.07	0.0100	Note 48
	N leach	Sep	0.867	1.016	0.0	1.000	1.000	0.653	0.0	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.35	0.0105	0.10	0.0105	0.10	0.0050	Note 49
Year	N	22	0	5.7	0	100	11	4.3	22	1.5	0.3	0.0	0.0	0.0	0.0	22	1.2	0.07	0.16	0.06	0.16	0.06	0.09	Note 47
3	Vol/NH3	Cattle	NO	1.4	NON	100.00	WWH	1.000	NO	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0125	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Sep	0.867	1.016	0.0	1.000	1.000	0.653	0.0	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0105	0.02	0.0105	0.02	0.0050	Note 49
Year	N	22	0	1.1	0	100	1	1.1	0	0.3	0.1	0.0	0.0	0.0	0.0	22	0.2	0.01	0.03	0.01	0.03	0.01	0.02	Note 47
4	Vol/NH3	Cattle	NO	0.3	NON	100.00	SBA	1.000	NO	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016	0.0	1.000	1.000	0.653	0.0	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0105	0.00	0.0105	0.00	0.0050	Note 49
Year	N	22	0	0.2	0	100	10	0.2	22	0.1	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.01	0.00	0.01	0.00	0.00	Note 47
5	Vol/NH3	Cattle	NO	0.1	NON	100.00	WBA	1.000	NO	0.66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016	0.0	1.000	1.000	0.653	0.0	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0105	0.00	0.0105	0.00	0.0050	Note 49
Year	N	22	0	0.0	0	100	229	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	0.00	0.00	Note 47
6	Vol/NH3	Cattle	NO	0.0	NON	100.00	WRB	1.000	NO	0.84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016	0.0	1.000	1.000	0.653	0.0	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0105	0.00	0.0105	0.00	0.0050	Note 49
Year	N	22	0	0.0	0	100	11	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Cattle	NO	0.0	NON	100.00	WWH	1.000	NO	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016	0.0	1.000	1.000	0.653	0.0	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0105	0.00	0.0105	0.00	0.0050	Note 49
Year	N	22	0	0.0	0	100	11	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Cattle	NO	0.0	NON	100.00	WWH	1.000	NO	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016	0.0	1.000	1.000	0.653	0.0	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0105	0.00	0.0105	0.00	0.0050	Note 49
Year	N	22	0	0.0	0	100	1	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Cattle	NO	0.0	NON	100.00	SBA	1.000	NO	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016	0.0	1.000	1.000	0.653	0.0	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0105	0.00	0.0105	0.00	0.0050	Note 49
Year	N	22	0	0.0	0	100	10	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Cattle	NO	0.0	NON	100.00	WBA	1.000	NO	0.66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016	0.0	1.000	1.000	0.653	0.0	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0105	0.00	0.0105	0.00	0.0050	Note 49

Year Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9 Year 10 Total Total/year 1

Area with crop, ha 0.69 0.15 0.03 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.89 1.28 Note 50

Possible additional non IPCC N2O-N emissions Value  
 N residues emissions, ratio of N2O-N to N: 0.0000  
 Increased soil N emissions, kg N2O-N/ha: 0.00  
 Natural background emissions, kg N2O-N/ha: 1.00  
 Total IPCC and non IPCC N2O 4.12  
 Total anthropogenic 4.12  
 Total including natural 5.01  
 Note 51  
 2.30 Note 51  
 2.30 Note 51  
 3.18 Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE CATTLE BEEF Note 43  
 AND CONTINUING WITH CATTLE DEEP LITTER TO PRODUCE CATTLE BEEF Note 43

Year Fertilizer/manure Or- Nnorm Crop Straw Cereal Fuel/ Manure Final N2O-N emission  
 # Store Amounts Store # ganic propor # use & benefit #71/ bev other handling N a- IPCC 1996  
 Name 1/0 Store Field 1/0 1/0 Name # Name leach used 1/0 Food #72 #8 #9 # Name mounts Each Total

Total N	RATIO OF N2O-N TO N IN FIRST CROP TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED										11.8	11.2	2.42	4.55	1.61	2.35	Note 45
Year N NH3	IPCC 1996										13.8	13.2	0.14	0.14	0.14	0.14	Note 45
1-10 N leach	0.0850										79.6	75.6	1.99	1.99	0.60	0.60	Note 45
TOTAL	0.1138										105.2	100.0					Note 45

N2O-N in food/beverage/fuel/other 0.3845 0.1985 Note 46

Year N	1	0	100.0	100.0	0	100	229	1	0	97.8	22	40.0	10.4	0.0	0.0	0.0	23	29.6	1.92	3.40	1.25	1.73	Note 47	
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WRB	1.000	NO	0.591	0.0	57.8	Cattle	0.84	0.0	0.0	0.0	1.8	0.04	0.0125	0.04	0.0100	Note 48
	N leach	1.022	1.000	ORG	1.00	1.000	0.0	0.0	0.0	57.8	Beef	2	10.9	Deep	0.0	0.0	0.0	0.0	0.0	1.45	0.0200	0.43	0.0050	Note 49
Year 2	Vol/NH3	Cattle	NO	0.0	32.2	0	100	11	0	24.2	22	5.8	1.2	0.0	0.0	0.0	23	4.6	0.43	0.97	0.30	0.53	Note 47	
	N leach	Deep	0.600	1.159	ORG	1.00	1.000	0.0	0.0	18.4	Cattle	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.08	0.0125	0.08	0.0100	Note 48
Year 3	Vol/NH3	Cattle	NO	0.0	5.0	0	100	11	0	3.8	22	0.9	0.2	0.0	0.0	0.0	23	0.7	0.07	0.15	0.05	0.08	Note 47	
	N leach	Deep	0.600	1.159	ORG	1.00	1.000	0.0	0.0	2.9	Cattle	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0125	0.01	0.0100	Note 48
Year 4	Vol/NH3	Cattle	NO	0.0	0.8	0	100	1	0	0.6	22	0.1	0.0	0.0	0.0	0.0	23	0.1	0.01	0.02	0.01	0.0100	Note 49	
	N leach	Deep	0.600	1.159	ORG	1.00	1.000	0.0	0.0	0.4	Cattle	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.07	0.0200	0.02	0.0050	Note 49
Year 5	Vol/NH3	Cattle	NO	0.0	0.2	NON	100.00	SBA	1.000	NO	0.760	0.0	0.0	0.0	0.0	0.0	23	0.0	0.01	0.0125	0.00	0.0100	Note 48	
	N leach	Deep	0.600	1.159	ORG	1.00	1.000	0.0	0.0	0.4	Beef	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0200	0.00	0.0050	Note 49
Year 6	Vol/NH3	Cattle	NO	0.0	0.1	0	100	10	0	0.1	22	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.00	Note 47	
	N leach	Deep	0.600	1.159	ORG	1.00	1.000	0.0	0.0	0.1	Cattle	0.66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48
Year 7	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WBA	1.000	NO	0.760	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.00	Note 49	
	N leach	Deep	0.600	1.159	ORG	1.00	1.000	0.0	0.0	0.1	Beef	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year 8	Vol/NH3	Cattle	NO	0.0	0.0	0	100	11	0	0.0	22	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.00	Note 47	
	N leach	Deep	0.600	1.159	ORG	1.00	1.000	0.0	0.0	0.0	Cattle	0.84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48
Year 9	Vol/NH3	Cattle	NO	0.0	0.0	NON	100.00	WWH	1.000	NO	0.760	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.00	Note 49	
	N leach	Deep	0.600	1.159	ORG	1.00	1.000	0.0	0.0	0.0	Beef	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year 10	Vol/NH3	Cattle	NO	0.0	0.0	0	100	10	0	0.0	22	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.00	Note 47	
	N leach	Deep	0.600	1.159	ORG	1.00	1.000	0.0	0.0	0.0	Cattle	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48
Year 11	Vol/NH3	Cattle	NO	0.0	0.0	0	100	1	0	0.0	22	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.00	Note 49	
	N leach	Deep	0.600	1.159	ORG	1.00	1.000	0.0	0.0	0.0	Beef	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0200	0.00	0.0050	Note 49

Year Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9 Year 10 Total Total/year 1

Area with crop, ha 0.69 0.12 0.02 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.84 1.21 Note 50

Possible additional non IPCC N2O-N emissions Value  
 N residues emissions, ratio of N2O-N to N: 0.0000  
 Increased soil N emissions, kg N2O-N/ha: 0.00  
 Natural background emissions, kg N2O-N/ha: 1.00  
 Total IPCC and non IPCC N2O 4.55  
 Total anthropogenic 4.55  
 Total including natural 5.39  
 Note 51  
 Note 51  
 Note 51  
 Note 51



N CHAIN STARTING WITH N FERTILIZER AND CONTINUING WITH MANURE FROM GRAZING CATTLE TO PRODUCE Cereal benefit 1/0 Straw used 1/0 Crop use & leach Cattle N 229 IPCC 1996 0.0854 IPCC 2006 0.0713

Fertilizer/manure Store 1/0 Store 1/0 Field 1/0 Or-ganic 1/0 Nnorm propor 1/0 Crop # Name 1/0 Use # Name Fuel/other #9 N crop #71-#72 Food Fed Fodder: Uses #21-61 IPCC 1996 2.09 IPCC 2006 0.63

Total N	RATIO OF N2O-N TO N IN FIRST CROP														TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED			
Year 1-10 N leach	ACCORDING TO FIRST YEAR TOTAL														TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3			
	0.1161														11.7			
	0.0713														11.7			
	0.0540														4.6			
	0.0854														83.7			
	0.0713														100.0			

N2O-N in food/beverage/fuel/other

Year	N	Vol/NH3	N	NO	100.0	0	100	229	1	0	97.8	22	40.0	10.4	0.0	0.0	0.0	29.6	2.50	4.64	2.18	2.85	Note 45	
1	Year	1	1	NO	0.0	0	100.0	229	1	0	57.8	Cattle	0.84	0.84	0.0	0.0	0.0	0.0	24	1.95	3.42	1.71	2.16	Note 47
	N leach	1.022	1.000	ORG	1.000	1.000	WRB	1.000	NO	0.0	57.8	Beef	2	10.9	Graz	0.0	0.0	0.0	0.02	0.0125	0.02	0.0100	Note 48	
Year 2	1	24	0	29.6	0.0	0	100	11	0	0	27.5	22	5.3	1.1	0.0	0.0	0.0	4.2	0.48	1.05	0.41	0.59	Note 47	
	Vol/NH3	Cattle	NO	0.0	0.0	0	100.00	WWH	1.000	NO	22.2	Cattle	0.67	0.67	0.0	0.0	0.0	0.0	0.02	0.0125	0.02	0.0100	Note 48	
	N leach	Graz	0.484	1.000	0.0	1.000	1.000	ORG	0.806	0.0	22.2	Beef	2	3.7	Graz	0.0	0.0	0.0	0.55	0.0200	0.17	0.0200	Note 49	
Year 3	1	24	0	4.2	0.0	0	100	11	0	0	3.9	22	0.8	0.2	0.0	0.0	0.0	0.6	0.07	0.15	0.06	0.08	Note 47	
	Vol/NH3	Cattle	NO	0.0	0.0	0	100.00	WWH	1.000	NO	3.2	Cattle	0.67	0.67	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48	
	N leach	Graz	0.484	1.000	0.0	1.000	1.000	ORG	0.806	0.0	3.2	Beef	2	0.5	Graz	0.0	0.0	0.0	0.08	0.0200	0.02	0.0200	Note 49	
Year 4	1	24	0	0.6	0.0	0	100	1	0	0	0.6	22	0.1	0.0	0.0	0.0	0.0	0.1	0.01	0.02	0.01	0.01	Note 47	
	Vol/NH3	Cattle	NO	0.0	0.0	0	100.00	SBA	1.000	NO	0.5	Cattle	0.65	0.65	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48	
	N leach	Graz	0.484	1.000	0.0	1.000	1.000	ORG	0.806	0.0	0.5	Beef	2	0.1	Graz	0.0	0.0	0.0	0.01	0.0200	0.00	0.0200	Note 49	
Year 5	1	24	0	0.1	0.0	0	100	10	0	0	0.1	22	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47	
	Vol/NH3	Cattle	NO	0.0	0.0	0	100.00	WBA	1.000	NO	0.1	Cattle	0.66	0.66	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48	
	N leach	Graz	0.484	1.000	0.0	1.000	1.000	ORG	0.806	0.0	0.1	Beef	2	0.0	Graz	0.0	0.0	0.0	0.00	0.0200	0.00	0.0200	Note 49	
Year 6	1	24	0	0.0	0.0	0	100	229	1	0	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47	
	Vol/NH3	Cattle	NO	0.0	0.0	0	100.00	WRB	1.000	NO	0.0	Cattle	0.84	0.84	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48	
	N leach	Graz	0.484	1.000	0.0	1.000	1.000	ORG	0.806	0.0	0.0	Beef	2	0.0	Graz	0.0	0.0	0.0	0.00	0.0200	0.00	0.0200	Note 49	
Year 7	1	24	0	0.0	0.0	0	100	11	0	0	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47	
	Vol/NH3	Cattle	NO	0.0	0.0	0	100.00	WWH	1.000	NO	0.0	Cattle	0.67	0.67	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48	
	N leach	Graz	0.484	1.000	0.0	1.000	1.000	ORG	0.806	0.0	0.0	Beef	2	0.0	Graz	0.0	0.0	0.0	0.00	0.0200	0.00	0.0200	Note 49	
Year 8	1	24	0	0.0	0.0	0	100	11	0	0	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47	
	Vol/NH3	Cattle	NO	0.0	0.0	0	100.00	WWH	1.000	NO	0.0	Cattle	0.67	0.67	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48	
	N leach	Graz	0.484	1.000	0.0	1.000	1.000	ORG	0.806	0.0	0.0	Beef	2	0.0	Graz	0.0	0.0	0.0	0.00	0.0200	0.00	0.0200	Note 49	
Year 9	1	24	0	0.0	0.0	0	100	1	0	0	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47	
	Vol/NH3	Cattle	NO	0.0	0.0	0	100.00	SBA	1.000	NO	0.0	Cattle	0.65	0.65	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48	
	N leach	Graz	0.484	1.000	0.0	1.000	1.000	ORG	0.806	0.0	0.0	Beef	2	0.0	Graz	0.0	0.0	0.0	0.00	0.0200	0.00	0.0200	Note 49	
Year 10	1	24	0	0.0	0.0	0	100	10	0	0	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47	
	Vol/NH3	Cattle	NO	0.0	0.0	0	100.00	WBA	1.000	NO	0.0	Cattle	0.66	0.66	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48	
	N leach	Graz	0.484	1.000	0.0	1.000	1.000	ORG	0.806	0.0	0.0	Beef	2	0.0	Graz	0.0	0.0	0.0	0.00	0.0200	0.00	0.0200	Note 49	

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total	Total/year 1
Area with crop, ha	0.69	0.09	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	1.15
Possible additional non IPCC N2O-N emissions	Value	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.64
N residues emissions, ratio of N2O-N to N:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.85
Increased soil N emissions, kg N2O-N/ha:	1.00	0.69	0.09	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.80	3.65
Natural background emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.85
Total IPCC and non IPCC N2O	Total including natural											5.44
Note 51	Kind of source											Note 51
Note 51	Current crops											2.85
Note 51	Total anthropogenic											4.64
Note 51	Total including natural											3.65

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE Cereal Straw Crop Crop Fuel/ Fuel/ N crop Food/ Fuel/ Manure Final N2O-N emission  
 AND CONTINUING WITH LIQUID PIG MANURE TO PRODUCE benefit used & use # #71/ bev #8 #9 other #9 # Name mounts Each Total IPCC 1996 IPCC 2006  
 Name 1/0 Store Field 1/0 Or- ganic 1/0 Nnorm Crop # Name Use Fodder: Uses #21-61 Food #72 #8 #9 # Name mounts Each Total N2O-N emission  
 # Store Amounts 1/0 Store 1/0 Name 1/0 Name # Name #71/ bev #8 #9 # Name mounts Each Total IPCC 1996 IPCC 2006  
 Name 1/0 Store Field 1/0 Name 1/0 Name # Name Use Fodder: Uses #21-61 Food #72 #8 #9 # Name mounts Each Total N2O-N emission

Year	Fertilizer/manure #	Store	Amounts	Field	Or- ganic	Nnorm	Crop	Straw	Crop	use &	Use #	Fodder: Uses #21-61	Food #72	#8	#9	Fuel/ other #9	Manure handling N a-	Final N a-	N2O-N emission IPCC 1996	N2O-N emission IPCC 2006	Total	
Total N	1	0	100.0	100.0	0	100	229	1	0	97.8	32	40.0	16.7	0.0	0.0	0.0	31	19.7	1.63	3.46	1.44	2.07
Year N NH3	NO	0.0	2.2	NON	100.00	WRB	1.000	NO	0	57.8	Pig	0.84	0.0	0.0	0.0	0.0	Pig	3.3	0.05	0.125	1.21	1.70
Year N leach	1.022	1.000	ORG	1.00	1.000	0.591	0.0	0	0	57.8	Pork	3	10.9	Liquid	0.0	0.0	Liquid	0.0	1.45	0.0010	0.43	0.0050
Year 2	31	0	20.0	0	100	11	1.000	NO	0	15.0	32	6.0	2.5	0.0	0.0	0.0	31	3.5	0.22	0.50	0.19	0.31
Year N leach	Liquid	1.000	5.0	NON	100.00	WWH	1.000	NO	0	9.0	Pig	0.67	0.0	0.0	0.0	0.0	Pig	0.5	0.05	0.0125	0.05	0.1000
Year N leach	Liquid	1.000	3.0	0	100	11	1.000	0	0	2.3	32	0.9	0.4	0.0	0.0	0.0	Liquid	0.0	0.23	0.0010	0.07	0.0050
Year 3	31	0	0.8	NON	100.00	WWH	1.000	NO	0	1.4	Pig	0.67	0.1	0.0	0.0	0.0	Pig	0.1	0.01	0.0125	0.01	0.1000
Year N leach	Liquid	1.000	0.5	0	100	1	1.000	0	0	0.3	32	0.1	0.1	0.0	0.0	0.0	Liquid	0.0	0.03	0.0010	0.01	0.0050
Year 4	31	0	0.1	NON	100.00	SBA	1.000	NO	0	0.2	Pig	0.65	0.0	0.0	0.0	0.0	Pig	0.0	0.00	0.0125	0.00	0.1000
Year N leach	Liquid	1.000	0.1	0	100	10	1.000	0	0	0.2	Pork	3	0.0	0.0	0.0	0.0	Liquid	0.0	0.01	0.0010	0.00	0.0050
Year N leach	Liquid	1.000	0.1	0	100	10	1.000	0	0	0.1	32	0.0	0.0	0.0	0.0	0.0	Liquid	0.0	0.00	0.00	0.00	0.00
Year 5	31	0	0.0	NON	100.00	WBA	1.000	NO	0	0.0	Pig	0.66	0.0	0.0	0.0	0.0	Pig	0.0	0.00	0.0125	0.00	0.1000
Year N leach	Liquid	1.000	0.0	0	100	1.000	0.600	0.0	0	0.0	Pork	3	0.0	0.0	0.0	0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050
Year N leach	Liquid	1.000	0.0	0	100	229	1.000	NO	0	0.0	32	0.0	0.0	0.0	0.0	0.0	Liquid	0.0	0.00	0.00	0.00	0.00
Year 6	31	0	0.0	NON	100.00	WRB	1.000	NO	0	0.0	Pig	0.84	0.0	0.0	0.0	0.0	Pig	0.0	0.00	0.0125	0.00	0.1000
Year N leach	Liquid	1.000	0.0	0	100	1.000	0.600	0.0	0	0.0	Pork	3	0.0	0.0	0.0	0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050
Year N leach	Liquid	1.000	0.0	0	100	11	1.000	NO	0	0.0	32	0.0	0.0	0.0	0.0	0.0	Pig	0.0	0.00	0.0125	0.00	0.1000
Year 7	31	0	0.0	NON	100.00	WWH	1.000	NO	0	0.0	Pig	0.67	0.0	0.0	0.0	0.0	Pig	0.0	0.00	0.0125	0.00	0.1000
Year N leach	Liquid	1.000	0.0	0	100	1.000	0.600	0.0	0	0.0	Pork	3	0.0	0.0	0.0	0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050
Year 8	31	0	0.0	NON	100.00	WWH	1.000	NO	0	0.0	32	0.0	0.0	0.0	0.0	0.0	Pig	0.0	0.00	0.0125	0.00	0.1000
Year N leach	Liquid	1.000	0.0	0	100	1.000	0.600	0.0	0	0.0	Pork	3	0.0	0.0	0.0	0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050
Year 9	31	0	0.0	NON	100.00	SBA	1.000	NO	0	0.0	32	0.0	0.0	0.0	0.0	0.0	Pig	0.0	0.00	0.0125	0.00	0.1000
Year N leach	Liquid	1.000	0.0	0	100	1.000	0.600	0.0	0	0.0	Pig	0.65	0.0	0.0	0.0	0.0	Pig	0.0	0.00	0.0125	0.00	0.1000
Year N leach	Liquid	1.000	0.0	0	100	10	1.000	NO	0	0.0	32	0.0	0.0	0.0	0.0	0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050
Year 10	31	0	0.0	NON	100.00	WBA	1.000	NO	0	0.0	32	0.0	0.0	0.0	0.0	0.0	Pig	0.0	0.00	0.0125	0.00	0.1000
Year N leach	Liquid	1.000	0.0	0	100	1.000	0.600	0.0	0	0.0	Pork	3	0.0	0.0	0.0	0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050

N2O-N in food/beverage/fuel/other

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
Year	0.69	0.12	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.21
Area with crop, ha											
Possible additional non IPCC N2O-N emissions											
N residues emissions, ratio of N2O-N to N:	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural background emissions, kg N2O-N/ha:	1.00	0.69	0.12	0.02	0.00	0.00	0.00	0.00	0.00	0.00	4.30

Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9 Year 10 Total Total/year 1  
 Kind of source  
 Current crops  
 Total anthropogenic  
 Total including natural  
 Total IPCC and non IPCC N2O  
 Note 43  
 Note 43  
 Note 44  
 Note 44  
 Note 44  
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N CHAIN STARTING WITH N FERTILIZER TO PRODUCE Cereal Straw Crop Use Feeder: N crop Food/ Fuel/ Manure Final N2O-N emission  
 AND CONTINUING WITH SEPARATED PIG MANURE TO PRODUCE benefit used & leach Name Fed Food #71/ be# other #9 # Name mounts handling N a- IPCC 2006  
 Note 43 Note 43 Note 44 Note 44 Note 44

Year Fertilizer/manure Or- Nnorm Crop Crop Use Feeder: N crop Food/ Fuel/ Manure Final N2O-N emission  
 # Store Amounts ganic propor # #71/ be# other #9 # Name mounts handling N a- IPCC 1996 IPCC 2006  
 Name 1/0 Store Field 1/0 Name 1/0 leach Name Fed Food #72 #8 #9 # Name mounts Each Total Each Total

Total N	RATIO OF N2O-N TO N IN FIRST CROP										TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED									
Year N NH3	IPCC 1996					IPCC 2006					TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3					TOTAL N AMOUNTS IN KG AND % LEACHED				
1-10 N leach	0.0767	0.0427	0.0515	19.2	19.1	0.0767	0.0427	0.0515	12.6	12.5	0.0767	0.0427	0.0515	68.8	68.4	0.0767	0.0427	0.0515	100.5	100.0
TOTAL	0.0918	0.0515	0.0515	100.0	100.0	0.0918	0.0515	0.0515	100.0	100.0	0.0918	0.0515	0.0515	100.5	100.0	0.0918	0.0515	0.0515	100.5	100.0

N2O-N in food/beverage/fuel/other

Year N	1	0	100.0	100.0	0	100	229	1	0	97.8	32	40.0	16.7	0.0	0.0	0.0	0.0	0.0	32	23.3	1.56	3.07	1.21	1.71	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WRB	1.000	NO	0.591	0.0	57.8	Pig	0.84	0.0	10.9	Sep	3	0.0	0.06	0.0125	0.06	0.0100	Note 48
Year N	32	0	19.5	19.5	0	100	11	0	0	14.7	32	5.1	2.1	0.0	0.0	0.0	0.0	0.0	32	3.0	0.23	0.53	0.43	0.0050	Note 49
2	Vol/NH3	Pig	NO	0.0	4.9	NON	100.00	WWH	1.000	NO	0.653	0.0	9.6	Pig	0.67	0.0	2.0	Sep	3	0.0	0.05	0.0125	0.05	0.0100	Note 48
Year N	32	0	2.5	2.5	0	100	11	0	0	1.9	32	0.6	0.3	0.0	0.0	0.0	0.0	0.0	32	0.4	0.03	0.07	0.02	0.04	Note 47
3	Vol/NH3	Pig	NO	0.0	0.6	NON	100.00	WWH	1.000	NO	0.653	0.0	1.2	Pig	0.67	0.0	0.3	Sep	3	0.1	0.01	0.0125	0.01	0.0100	Note 48
Year N	32	0	0.3	0.3	0	100	1	0	0	0.2	32	0.1	0.0	0.0	0.0	0.0	0.0	0.0	32	0.0	0.00	0.01	0.00	0.01	Note 47
4	Vol/NH3	Pig	NO	0.0	0.1	NON	100.00	SBA	1.000	NO	0.653	0.0	0.2	Pig	0.65	0.0	0.0	Sep	3	0.0	0.00	0.0125	0.00	0.0100	Note 48
Year N	32	0	0.0	0.0	0.0	100	10	0	0	0.0	32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32	0.0	0.00	0.00	0.00	0.00	Note 47
5	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	WBA	1.000	NO	0.653	0.0	0.0	Pig	0.66	0.0	0.0	Sep	3	0.0	0.00	0.0125	0.00	0.0100	Note 48
Year N	32	0	0.0	0.0	0.0	100	229	0	0	0.0	32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32	0.0	0.00	0.00	0.00	0.00	Note 47
6	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	WRB	1.000	NO	0.653	0.0	0.0	Pig	0.84	0.0	0.0	Sep	3	0.0	0.00	0.0125	0.00	0.0100	Note 48
Year N	32	0	0.0	0.0	0.0	100	11	0	0	0.0	32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32	0.0	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	WWH	1.000	NO	0.653	0.0	0.0	Pig	0.67	0.0	0.0	Sep	3	0.0	0.00	0.0125	0.00	0.0100	Note 48
Year N	32	0	0.0	0.0	0.0	100	11	0	0	0.0	32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32	0.0	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	WWH	1.000	NO	0.653	0.0	0.0	Pig	0.67	0.0	0.0	Sep	3	0.0	0.00	0.0125	0.00	0.0100	Note 48
Year N	32	0	0.0	0.0	0.0	100	1.000	0	0	0.0	32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32	0.0	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	SBA	1.000	NO	0.653	0.0	0.0	Pig	0.65	0.0	0.0	Sep	3	0.0	0.00	0.0125	0.00	0.0100	Note 48
Year N	32	0	0.0	0.0	0.0	100	10	0	0	0.0	32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32	0.0	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Pig	NO	0.0	0.0	NON	100.00	WBA	1.000	NO	0.653	0.0	0.0	Pig	0.66	0.0	0.0	Sep	3	0.0	0.00	0.0125	0.00	0.0100	Note 48
N leach	Sep	0.867	1.024	0.867	1.024	ORG	1.00	1.000	0.653	0.0	0.0	0.66	0.66	3	0.0	0.0	0.0	0.0	3	0.0	0.00	0.0105	0.00	0.0050	Note 49

Year Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9 Year 10 Total Total/year 1

Area with crop, ha 0.69 0.11 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.81 1.17 Note 50

Possible additional non IPCC N2O-N emissions Value  
 N residues emissions, ratio of N2O-N to N: 0.0000  
 Increased soil N emissions, kg N2O-N/ha: 0.00  
 Natural background emissions, kg N2O-N/ha: 1.00  
 Total IPCC and non IPCC N2O 3.67  
 Total anthropogenic 3.67  
 Total including natural 4.49  
 Note 51 Note 51 Note 51 Note 51



N CHAIN STARTING WITH N FERTILIZER TO PRODUCE TO PRODUCE TO PRODUCE  
 AND CONTINUING WITH MANURE FROM ROOTING PIGS WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR PIG PORK PIG PORK

Year Fertilizer/manure # Store Amounts Field 1/0 Or-ganic 1/0 Nnorm propor 1/0 Crop # N crop Food/ #71/ bev #72 Food #8 Fuel/ other #9 Manure handling # Name Final N a- mounts N2O-N emission IPCC 1996 Each Total N2O-N emission IPCC 2006 Each Total

Total N	RATIO OF N2O-N TO N IN FIRST CROP													19.7	19.7
Year N NH3	IPCC 1996													4.1	4.1
1-10 N leach	IPCC 2006													76.2	76.2
	TOTAL N AMOUNTS IN KG AND %													100.0	100.0
	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED														

N2O-N in food/beverage/fuel/other

Year	N	Vol/NH3	N	100.0	0	100	229	1	0	97.8	32	40.0	16.7	0.0	0.0	0.0	34	23.3	1.82	3.29	1.58	2.04	Note 47
1	Vol/NH3	N	NO	2.2	NON	100.00	WRB	1.000	NO	57.8	Pig	0.84	0.0	0.0	0.0	0.0	Pig	0.0	0.02	0.125	0.02	0.0100	Note 48
	N leach			1.022	ORG	1.00	1.000	0.591	0.0	57.8	Pork	3	10.9	Root			Root	0.0	1.45	0.0200	0.43	0.0200	Note 49
Year	2	Vol/NH3	Pig	NO	0	100	11	0	0	21.7	32	6.1	2.5	0.0	0.0	0.0	34	3.5	0.38	0.78	0.32	0.46	Note 47
	N leach	Root		0.699	ORG	1.00	1.000	1.000	NO	15.6	Pig	0.67	0.0	0.0	0.0	0.0	Pig	0.0	0.02	0.125	0.02	0.0100	Note 48
Year	3	Vol/NH3	Pig	NO	0	100	11	0	0	3.3	32	0.9	0.4	0.0	0.0	0.0	34	0.5	0.06	0.12	0.05	0.07	Note 47
	N leach	Root		0.699	ORG	1.00	1.000	1.000	NO	2.4	Pig	0.67	0.0	0.0	0.0	0.0	Pig	0.0	0.00	0.125	0.00	0.0100	Note 48
Year	4	Vol/NH3	Pig	NO	0.5	100	1	0	0	0.5	32	0.1	0.1	0.0	0.0	0.0	34	0.1	0.01	0.02	0.01	0.01	Note 47
	N leach	Root		0.699	ORG	1.00	1.000	1.000	NO	0.4	Pig	0.65	0.0	0.0	0.0	0.0	Pig	0.0	0.00	0.125	0.00	0.0100	Note 48
Year	5	Vol/NH3	Pig	NO	0.1	100	10	0	0	0.1	32	0.0	0.0	0.0	0.0	0.0	34	0.0	0.00	0.00	0.00	0.00	Note 47
	N leach	Root		0.699	ORG	1.00	1.000	1.000	NO	0.1	Pig	0.66	0.0	0.0	0.0	0.0	Pig	0.0	0.00	0.125	0.00	0.0100	Note 48
Year	6	Vol/NH3	Pig	NO	0.0	100	229	1	0	0.1	32	0.0	0.0	0.0	0.0	0.0	34	0.0	0.00	0.00	0.00	0.00	Note 47
	N leach	Root		0.699	ORG	1.00	1.000	1.000	NO	0.1	Pork	3	0.0	0.0	0.0	0.0	Root	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	7	Vol/NH3	Pig	NO	0.0	100	11	0	0	0.0	32	0.0	0.0	0.0	0.0	0.0	34	0.0	0.00	0.0125	0.00	0.00	Note 47
	N leach	Root		0.699	ORG	1.00	1.000	1.000	NO	0.0	Pork	3	0.0	0.0	0.0	0.0	Root	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	8	Vol/NH3	Pig	NO	0.0	100	11	0	0	0.0	32	0.0	0.0	0.0	0.0	0.0	34	0.0	0.00	0.0125	0.00	0.00	Note 47
	N leach	Root		0.699	ORG	1.00	1.000	1.000	NO	0.0	Pig	0.67	0.0	0.0	0.0	0.0	Root	0.0	0.00	0.0200	0.00	0.0200	Note 49
Year	9	Vol/NH3	Pig	NO	0.0	100	1	0	0	0.0	32	0.0	0.0	0.0	0.0	0.0	34	0.0	0.00	0.00	0.00	0.00	Note 47
	N leach	Root		0.699	ORG	1.00	1.000	1.000	NO	0.0	Pig	0.65	0.0	0.0	0.0	0.0	Pig	0.0	0.00	0.125	0.00	0.0100	Note 48
Year	10	Vol/NH3	Pig	NO	0.0	100	10	0	0	0.0	32	0.0	0.0	0.0	0.0	0.0	34	0.0	0.00	0.00	0.00	0.00	Note 47
	N leach	Root		0.699	ORG	1.00	1.000	1.000	NO	0.0	Pig	0.66	0.0	0.0	0.0	0.0	Pig	0.0	0.00	0.125	0.00	0.0100	Note 48
Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total	Total/year 1											
Area with crop, ha		0.69	0.10	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	1.17										Note 50

Possible additional non IPCC N2O-N emissions Value  
 N residues emissions, ratio of N2O-N to N: 0.0000  
 Increased soil N emissions, kg N2O-N/ha: 0.00  
 Natural background emissions, kg N2O-N/ha: 1.00

Total IPCC and non IPCC N2O 4.22  
 Total anthropogenic 4.22  
 Total including natural 5.03

N CHAIN STARTING WITH N FERTILIZER AND CONTINUING WITH LIQUID POULTRY MANURE TO PRODUCE Cereal benefit 1/0 TO PRODUCE Straw used 1/0 Crop use & leach 1/0 Use # Name Fuel/ other #9 N crop Food/ bev #72 #8 Fodder: Uses #21-61 Food Fed TOTAL N AMOUNTS IN KG AND % LEACHED

Year Fertilizer/manure # Store Amounts Store 1/0 Field 1/0 Or-ganic 1/0 Nnorm propor # Name 1/0 Crop use & leach 1/0 Use # Name Fuel/ other #9 N crop Food/ bev #72 #8 Fodder: Uses #21-61 Food Fed Manure handling # Name Final N a-mounts Total N2O-N emission IPCC 1996 Each Total N2O-N emission IPCC 2006 Each Total

RATIO OF N2O-N TO N IN FIRST CROP		TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	
Year	N/NH3	IPCC 1996	IPCC 2006
1-10	N leach	0.0716	0.0419
	TOTAL	0.0843	0.0497

N2O-N in food/beverage/fuel/other

Year	N	1	0	100.0	100.0	0	100	229	1	0	97.8	42	40.0	20.4	0.0	0.0	19.6	1.38	2.86	1.20	1.39	3.37
1	Vol/NH3	N	NO	0.0	0.0	2.2	NON	100.00	WRB	1.000	NO	57.8	Poultry	0.84	0.0	0.0	2.0	0.04	0.125	0.04	0.09	0.09
	N leach	1.022	1.000	1.000	1.000	ORG	1.00	1.000	0.591	0.0	57.8	Meat	4	10.9	Liquid	0.0	2.0	1.45	0.0010	0.43	0.51	
Year	N	41	0	17.6	17.6	0	100	11	0	0	13.2	42	4.6	2.3	0.0	0.0	2.2	0.19	0.45	0.16	1.69	
2	Vol/NH3	Poultry	NO	0.0	0.0	4.4	NON	100.00	WWH	1.000	NO	8.6	Poultry	0.67	0.0	0.0	0.2	0.05	0.125	0.05	0.05	0.05
	N leach	Liquid	0.867	1.000	1.000	ORG	1.00	1.000	0.653	0.0	8.6	Meat	4	1.8	Liquid	0.0	0.2	0.22	0.0010	0.06	0.06	
Year	N	41	0	2.0	2.0	0	100	11	0	0	1.5	42	0.5	0.3	0.0	0.0	0.3	0.02	0.05	0.02	0.02	
3	Vol/NH3	Poultry	NO	0.0	0.0	0.5	NON	100.00	WWH	1.000	NO	1.0	Poultry	0.67	0.0	0.0	0.0	0.01	0.125	0.01	0.01	0.01
	N leach	Liquid	0.867	1.000	1.000	ORG	1.00	1.000	0.653	0.0	1.0	Meat	4	0.2	Liquid	0.0	0.2	0.02	0.0010	0.01	0.01	
Year	N	41	0	0.2	0.2	0	100	1	0	0	0.2	42	0.1	0.0	0.0	0.0	0.0	0.00	0.01	0.00	0.00	
4	Vol/NH3	Poultry	NO	0.2	0.2	0.1	NON	100.00	SBA	1.000	NO	0.1	Poultry	0.65	0.0	0.0	0.0	0.00	0.125	0.00	0.00	0.00
	N leach	Liquid	0.867	1.000	1.000	ORG	1.00	1.000	0.653	0.0	0.1	Meat	4	0.0	Liquid	0.0	0.0	0.00	0.0010	0.00	0.00	
Year	N	41	0	0.0	0.0	0.0	0	10	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
5	Vol/NH3	Poultry	NO	0.0	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Poultry	0.66	0.0	0.0	0.0	0.00	0.125	0.00	0.00	0.00
	N leach	Liquid	0.867	1.000	1.000	ORG	1.00	1.000	0.653	0.0	0.0	Meat	4	0.0	Liquid	0.0	0.0	0.00	0.0010	0.00	0.00	
Year	N	41	0	0.0	0.0	0.0	0	229	1	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
6	Vol/NH3	Poultry	NO	0.0	0.0	0.0	NON	100.00	WRB	1.000	NO	0.0	Poultry	0.84	0.0	0.0	0.0	0.00	0.125	0.00	0.00	0.00
	N leach	Liquid	0.867	1.000	1.000	ORG	1.00	1.000	0.653	0.0	0.0	Meat	4	0.0	Liquid	0.0	0.0	0.00	0.0010	0.00	0.00	
Year	N	41	0	0.0	0.0	0.0	0	11	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
7	Vol/NH3	Poultry	NO	0.0	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Poultry	0.67	0.0	0.0	0.0	0.00	0.125	0.00	0.00	0.00
	N leach	Liquid	0.867	1.000	1.000	ORG	1.00	1.000	0.653	0.0	0.0	Meat	4	0.0	Liquid	0.0	0.0	0.00	0.0010	0.00	0.00	
Year	N	41	0	0.0	0.0	0.0	0	11	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
8	Vol/NH3	Poultry	NO	0.0	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Poultry	0.67	0.0	0.0	0.0	0.00	0.125	0.00	0.00	0.00
	N leach	Liquid	0.867	1.000	1.000	ORG	1.00	1.000	0.653	0.0	0.0	Meat	4	0.0	Liquid	0.0	0.0	0.00	0.0010	0.00	0.00	
Year	N	41	0	0.0	0.0	0.0	0	11	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
9	Vol/NH3	Poultry	NO	0.0	0.0	0.0	NON	100.00	SBA	1.000	NO	0.0	Poultry	0.65	0.0	0.0	0.0	0.00	0.125	0.00	0.00	0.00
	N leach	Liquid	0.867	1.000	1.000	ORG	1.00	1.000	0.653	0.0	0.0	Meat	4	0.0	Liquid	0.0	0.0	0.00	0.0010	0.00	0.00	
Year	N	41	0	0.0	0.0	0.0	0	10	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
10	Vol/NH3	Poultry	NO	0.0	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Poultry	0.66	0.0	0.0	0.0	0.00	0.125	0.00	0.00	0.00
	N leach	Liquid	0.867	1.000	1.000	ORG	1.00	1.000	0.653	0.0	0.0	Meat	4	0.0	Liquid	0.0	0.0	0.00	0.0010	0.00	0.00	
Year	N	41	0	0.0	0.0	0.0	0	10	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	

Year Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9 Year 10 Total Total/year 1

Area with crop, ha 0.69 0.10 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.80 1.16

Possible additional non IPCC N2O-N emissions Value 0.0000  
 N residues emissions, ratio of N2O-N to N: 0.00  
 Increased soil N emissions, kg N2O-N/ha: 1.00  
 Natural background emissions, kg N2O-N/ha:

Total IPCC and non IPCC N2O 3.37  
 Total anthropogenic 3.37  
 Total including natural 4.18

Kind of source Current crops  
 Total anthropogenic  
 Total including natural

Note 43  
 Note 43  
 Note 44  
 Note 44  
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Note 46  
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 Note 51

N CHAIN STARTING WITH N FERTILIZER AND CONTINUING WITH SEPARATED POULTRY MANURE TO PRODUCE CEREAL benefit 1/0 TO PRODUCE WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR FUEL/other #9

Year Fertilizer/manure # Store 1/0 Name 1/0 Store 1/0 N/Fertilizer manure # Store 1/0 Name 1/0 N/crop #71/ #72 Food #77/ #78 Fuel/ #9 Manure handling # Name Final N a- mounts Total N2O-N emission IPCC 1996 Each Total N2O-N emission IPCC 2006 Each Total

Total N	RATIO OF N2O-N TO N IN FIRST CROP		TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		22.6	22.6
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		11.7	11.7
1-10 N leach	0.0757	0.0423	TOTAL N AMOUNTS IN KG AND % LEACHED		65.8	65.8
TOTAL	0.0866	0.0487	TOTAL N AMOUNTS IN KG AND %		100.0	100.0

N2O-N in food/beverage/fuel/other

Year N	1	0	100.0	100.0	0	100	229	1	0	97.8	42	40.0	20.4	0.0	0.0	0.0	19.6	1.51	3.03	1.19	3.46	1.34	1.95	
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WRB	1.000	NO	0.591	0.0	10.9	Sep	4	0.0	57.8	Poultry	0.84	0.0	42	42	42	42
Year N	leach	1.022	1.000	14.7	0	100	11	0	0	11.0	42	3.8	1.9	0.0	0.0	0.0	57.8	Meat	4	0.0	42	42	42	42
2	Vol/NH3	Poultry	NO	0.0	3.7	NON	100.00	WWH	1.000	NO	0.653	0.0	7.2	Poultry	0.67	0.0	7.2	Poultry	0.67	0.0	42	42	42	42
Year N	leach	Sep	0.867	1.000	1.4	0	100	11	0	1.1	42	0.4	0.2	0.0	0.0	0.0	7.2	Meat	4	0.0	42	42	42	42
3	Vol/NH3	Poultry	NO	0.0	0.4	NON	100.00	WWH	1.000	NO	0.653	0.0	0.7	Poultry	0.67	0.0	0.7	Poultry	0.67	0.0	42	42	42	42
Year N	leach	Sep	0.867	1.000	0.1	0	100	1	0	0.1	42	0.0	0.0	0.0	0.0	0.0	0.1	Sep	4	0.0	42	42	42	42
4	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	SBA	1.000	NO	0.653	0.0	0.1	Poultry	0.65	0.0	0.1	Poultry	0.65	0.0	42	42	42	42
Year N	leach	Sep	0.867	1.000	0.0	0	100	10	0	0.1	Meat	4	0.0	0.0	0.0	0.0	0.1	Sep	4	0.0	42	42	42	42
5	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WBA	1.000	NO	0.653	0.0	0.0	Poultry	0.66	0.0	0.0	Poultry	0.66	0.0	42	42	42	42
Year N	leach	Sep	0.867	1.000	0.0	0	100	1000	0.653	0.0	0.0	0.0	0.0	Meat	4	0.0	0.0	Meat	4	0.0	42	42	42	42
6	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WRB	1.000	NO	0.653	0.0	0.0	Poultry	0.84	0.0	0.0	Poultry	0.84	0.0	42	42	42	42
Year N	leach	Sep	0.867	1.000	0.0	0	100	11	0	0.0	Meat	4	0.0	0.0	0.0	0.0	0.0	Meat	4	0.0	42	42	42	42
7	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWH	1.000	NO	0.653	0.0	0.0	Poultry	0.67	0.0	0.0	Poultry	0.67	0.0	42	42	42	42
Year N	leach	Sep	0.867	1.000	0.0	0	100	1000	0.653	0.0	0.0	0.0	0.0	Meat	4	0.0	0.0	Meat	4	0.0	42	42	42	42
8	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWH	1.000	NO	0.653	0.0	0.0	Poultry	0.67	0.0	0.0	Poultry	0.67	0.0	42	42	42	42
Year N	leach	Sep	0.867	1.000	0.0	0	100	1000	0.653	0.0	0.0	0.0	0.0	Meat	4	0.0	0.0	Meat	4	0.0	42	42	42	42
9	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	SBA	1.000	NO	0.653	0.0	0.0	Poultry	0.65	0.0	0.0	Poultry	0.65	0.0	42	42	42	42
Year N	leach	Sep	0.867	1.000	0.0	0	100	1000	0.653	0.0	0.0	0.0	0.0	Meat	4	0.0	0.0	Meat	4	0.0	42	42	42	42
10	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WBA	1.000	NO	0.653	0.0	0.0	Poultry	0.66	0.0	0.0	Poultry	0.66	0.0	42	42	42	42
Year N	leach	Sep	0.867	1.000	0.0	0	100	1000	0.653	0.0	0.0	0.0	0.0	Meat	4	0.0	0.0	Meat	4	0.0	42	42	42	42

Year Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9 Year 10 Total Total/year 1

Area with crop, ha 0.69 0.08 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.78 1.13

Possible additional non IPCC N2O-N emissions Value 0.0000  
 N residues emissions, ratio of N2O-N to N: 0.00  
 Increased soil N emissions, kg N2O-N/ha: 1.00  
 Natural background emissions, kg N2O-N/ha: 0.69  
 Total IPCC and non IPCC N2O 3.46  
 Total anthropogenic 3.46  
 Total including natural 4.24  
 Note 51 1.95 Note 51 1.95 Note 51 2.73 Note 51





N CHAIN STARTING WITH N FERTILIZER AND CONTINUING WITH MANURE FROM SCRAPING POULTRY TO PRODUCE CEREAL benefit 1/0 TO PRODUCE WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR FUEL/other #9

Year	Fertilizer/manure #	Store 1/0	Amounts Store	Field 1/0	Or-ganic 1/0	Nnorm propor 1/0	Crop #	Straw used 1/0	Use Name	Fodder: Uses #21-61 Fed	N crop #71/ #72	Fuel/ bev #8	Manure handling # Name	Final N a-mounts	N2O-N emission IPCC 1996	N2O-N emission IPCC 2006	Total
Total N	1	0	100.0	100.0	2.2 NON	100.00 WRB	229	1	0	40.0	20.4	0.0	0.0	19.6	2.07	3.96	1.78
Year N NH3	NO	0.0	0.0	0.0	ORG	1.00 1.000	1.000 NO	1.000 NO	57.8 Poultry	0.84	0.0	0.0	0.0	0.0	0.02	0.125	0.04
1-10 N leach	1.022	1.000	1.000	1.000	19.6 0	100 11	1.000 NO	1.000 NO	18.2 42	3.5	1.8	0.0	0.0	1.7	1.45	0.200	0.43
Year 2	44	0	19.6	19.6	1.4 NON	100.00 WWH	11	0	0	0.67	0.0	0.0	0.0	0.0	0.29	0.67	0.25
N leach	Scrap	0.484	1.000	1.000	ORG	1.00 1.000	1.000 NO	1.000 NO	14.7 Poultry	4	0.2	0.0	0.0	0.0	0.01	0.125	0.01
Year 3	44	0	1.7	1.7	0.1 NON	100.00 WWH	11	0	0	0.67	0.0	0.0	0.0	0.2	0.03	0.06	0.11
N leach	Scrap	0.484	1.000	1.000	ORG	1.00 1.000	1.000 NO	1.000 NO	1.3 Poultry	4	0.0	0.0	0.0	0.0	0.00	0.125	0.00
Year 4	44	0	0.2	0.2	0.2 NON	100.00 SBA	1	0	0	0.65	0.0	0.0	0.0	0.0	0.03	0.200	0.01
N leach	Scrap	0.484	1.000	1.000	ORG	1.00 1.000	1.000 NO	1.000 NO	0.1 Poultry	4	0.0	0.0	0.0	0.0	0.00	0.125	0.00
Year 5	44	0	0.0	0.0	0.0 NON	100.00 WBA	10	0	0	0.66	0.0	0.0	0.0	0.0	0.00	0.200	0.00
N leach	Scrap	0.484	1.000	1.000	ORG	1.00 1.000	1.000 NO	1.000 NO	0.1 Meat	4	0.0	0.0	0.0	0.0	0.00	0.200	0.00
Year 6	44	0	0.0	0.0	0.0 NON	100.00 WRB	229	1	0	0.84	0.0	0.0	0.0	0.0	0.00	0.125	0.00
N leach	Scrap	0.484	1.000	1.000	ORG	1.00 1.000	1.000 NO	1.000 NO	0.0 Poultry	4	0.0	0.0	0.0	0.0	0.00	0.200	0.00
Year 7	44	0	0.0	0.0	0.0 NON	100.00 WWH	11	0	0	0.67	0.0	0.0	0.0	0.0	0.00	0.125	0.00
N leach	Scrap	0.484	1.000	1.000	ORG	1.00 1.000	1.000 NO	1.000 NO	0.0 Meat	4	0.0	0.0	0.0	0.0	0.00	0.200	0.00
Year 8	44	0	0.0	0.0	0.0 NON	100.00 WWH	11	0	0	0.67	0.0	0.0	0.0	0.0	0.00	0.125	0.00
N leach	Scrap	0.484	1.000	1.000	ORG	1.00 1.000	1.000 NO	1.000 NO	0.0 Poultry	4	0.0	0.0	0.0	0.0	0.00	0.200	0.00
Year 9	44	0	0.0	0.0	0.0 NON	100.00 SBA	1	0	0	0.65	0.0	0.0	0.0	0.0	0.00	0.125	0.00
N leach	Scrap	0.484	1.000	1.000	ORG	1.00 1.000	1.000 NO	1.000 NO	0.0 Poultry	4	0.0	0.0	0.0	0.0	0.00	0.200	0.00
Year 10	44	0	0.0	0.0	0.0 NON	100.00 WBA	10	0	0	0.66	0.0	0.0	0.0	0.0	0.00	0.125	0.00
N leach	Scrap	0.484	1.000	1.000	ORG	1.00 1.000	1.000 NO	1.000 NO	0.0 Poultry	4	0.0	0.0	0.0	0.0	0.00	0.200	0.00

N2O-N in food/beverage/fuel/other

TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED

TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3

TOTAL N AMOUNTS IN KG AND % LEACHED

TOTAL N AMOUNTS IN KG AND %

Year	N	Vol/NH3	N	NO	100.0	0	100	229	1	0	97.8	42	40.0	20.4	0.0	0.0	0.0	0.0	19.6	22.4	22.4
Year 1	1	Vol/NH3	N	NO	100.0	0	100	229	1	0	97.8	42	40.0	20.4	0.0	0.0	0.0	0.0	19.6	22.4	22.4
N leach	1.022	1.000	1.000	1.000	19.6 0	100 11	1.000 NO	1.000 NO	18.2 42	3.5	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	3.7	3.7
Year 2	44	0	19.6	19.6	1.4 NON	100.00 WWH	11	0	0	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44	44
N leach	Scrap	0.484	1.000	1.000	ORG	1.00 1.000	1.000 NO	1.000 NO	14.7 Poultry	4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44	44
Year 3	44	0	1.7	1.7	0.1 NON	100.00 WWH	11	0	0	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.06	0.06
N leach	Scrap	0.484	1.000	1.000	ORG	1.00 1.000	1.000 NO	1.000 NO	1.3 Poultry	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44	44
Year 4	44	0	0.2	0.2	0.2 NON	100.00 SBA	1	0	0	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44	44
N leach	Scrap	0.484	1.000	1.000	ORG	1.00 1.000	1.000 NO	1.000 NO	0.1 Poultry	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44	44
Year 5	44	0	0.0	0.0	0.0 NON	100.00 WBA	10	0	0	0.66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44	44
N leach	Scrap	0.484	1.000	1.000	ORG	1.00 1.000	1.000 NO	1.000 NO	0.1 Meat	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44	44
Year 6	44	0	0.0	0.0	0.0 NON	100.00 WRB	229	1	0	0.84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44	44
N leach	Scrap	0.484	1.000	1.000	ORG	1.00 1.000	1.000 NO	1.000 NO	0.0 Poultry	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44	44
Year 7	44	0	0.0	0.0	0.0 NON	100.00 WWH	11	0	0	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44	44
N leach	Scrap	0.484	1.000	1.000	ORG	1.00 1.000	1.000 NO	1.000 NO	0.0 Meat	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44	44
Year 8	44	0	0.0	0.0	0.0 NON	100.00 WWH	11	0	0	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44	44
N leach	Scrap	0.484	1.000	1.000	ORG	1.00 1.000	1.000 NO	1.000 NO	0.0 Poultry	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44	44
Year 9	44	0	0.0	0.0	0.0 NON	100.00 SBA	1	0	0	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44	44
N leach	Scrap	0.484	1.000	1.000	ORG	1.00 1.000	1.000 NO	1.000 NO	0.0 Poultry	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44	44
Year 10	44	0	0.0	0.0	0.0 NON	100.00 WBA	10	0	0	0.66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44	44
N leach	Scrap	0.484	1.000	1.000	ORG	1.00 1.000	1.000 NO	1.000 NO	0.0 Poultry	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44	44

Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9 Year 10 Total Total/year 1

Area with crop, ha 0.69 0.06 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.76 1.09

Possible additional non IPCC N2O-N emissions Value 0.0000

N residues emissions, ratio of N2O-N to N: 0.00

Increased soil N emissions, kg N2O-N/ha: 1.00

Natural background emissions, kg N2O-N/ha:

Total IPCC and non IPCC N2O 3.96

Total anthropogenic 3.96

Total including natural 4.72

Note 43 Note 43

Note 44 Note 44

Note 44 Note 44

Note 45 Note 45

Note 45 Note 45

Note 46 Note 46

Note 47 Note 47

Note 48 Note 48

Note 49 Note 49

Note 49 Note 49

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Note 50 Note 50

Note 51 Note 51

Note 51 Note 51

Note 51 Note 51





N CHAIN STARTING WITH N FERTILIZER TO PRODUCE TO PRODUCE WINTER RAPESEED FOR PPO/BIODIESEL AND FUEL/ POULTRY EGGS POULTRY EGGS AND CONTINUING WITH POULTRY DEEP LITTER TO PRODUCE WINTER WHEAT FOR POULTRY EGGS

Year Fertilizer/manure # Store Amounts Field 1/0 Or-ganic 1/0 Nnorm propor tion, % Name # Crop use & leach Straw used 1/0 Cereal benefit 1/0 Fuel/ other #9 N crop #71/ #72 Food Fed Uses #21-61 Fodder: # Name mounts Final N a-mounts N2O-N emission IPCC 1996 Each Total N2O-N emission IPCC 2006 Each Total

Total N	RATIO OF N2O-N TO N IN FIRST CROP										TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED									
Year N NH3	IPCC 1996					IPCC 2006					TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3					TOTAL N AMOUNTS IN KG AND % LEACHED				
1-10 N leach	0.0828	0.0446	0.0529	0.0446	0.0529	10.5	20.5	69.3	69.1	100.0	10.5	20.4	69.1	100.0	1.97	3.91	1.39	2.11	Note 45	
TOTAL	0.0977	0.0529	0.0529	0.0529	0.0529	100.0	100.0	100.0	100.0	100.0	10.5	20.5	69.1	100.0	0.20	0.52	0.52	0.52	Note 45	

N2O-N in food/beverage/fuel/other

Year N	1	0	100.0	100.0	0	100	229	1	0	97.8	43	40.0	9.6	0.0	0.0	0.0	0.0	43	30.4	1.21	1.72	3.31	1.21	1.78	Note 47
1	Vol/NH3	N	NO	0.0	2.2	NON	100.0	WRB	1.000	NO	1.000	0.84	0.84	0.0	0.0	0.0	0.0	0.0	Poultry	12.1	0.14	0.0125	0.14	0.100	Note 48
N leach	1.022	1.000	1.000	1.000	0	1.000	1.000	0.591	0.0	57.8	Eggs	4	4	10.9	Deep	4	4	1.45	0.0200	0.43	1.45	0.0200	0.43	0.0050	Note 49
Year N	43	0	18.5	18.5	0	100	11	0	0	13.8	43	3.3	0.8	0.0	0.0	0.0	0.0	43	2.5	0.17	0.23	0.55	0.17	0.30	Note 47
2	Vol/NH3	Poultry	NO	0.0	4.6	NON	100.0	WWH	1.000	NO	1.000	0.67	0.67	0.0	0.0	0.0	0.0	0.0	Poultry	1.0	0.06	0.0125	0.06	0.0100	Note 48
N leach	0.600	1.013	1.013	1.013	0	1.000	1.000	0.760	0.0	10.5	Eggs	4	4	1.9	Deep	4	4	0.26	0.0200	0.08	0.26	0.0200	0.08	0.0050	Note 49
Year N	43	0	1.5	1.5	0	100	11	0	0	1.1	43	0.3	0.1	0.0	0.0	0.0	0.0	43	0.2	0.01	0.02	0.05	0.01	0.03	Note 47
3	Vol/NH3	Poultry	NO	0.0	0.4	NON	100.0	WWH	1.000	NO	1.000	0.67	0.67	0.0	0.0	0.0	0.0	0.0	Poultry	0.1	0.00	0.0125	0.00	0.0100	Note 48
N leach	0.600	1.013	1.013	1.013	0	1.000	1.000	0.760	0.0	0.9	Eggs	4	4	0.2	Deep	4	4	0.02	0.0200	0.01	0.02	0.0200	0.01	0.0050	Note 49
Year N	43	0	0.1	0.1	0	100	1	0	0	0.1	43	0.0	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.00	0.00	Note 47
4	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.0	SBA	1.000	NO	1.000	0.65	0.65	0.0	0.0	0.0	0.0	0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
N leach	0.600	1.013	1.013	1.013	0	1.000	1.000	0.760	0.0	0.1	Eggs	4	4	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0125	0.00	0.0100	Note 48
Year N	43	0	0.0	0.0	0.0	100	10	0	0	0.0	43	0.0	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.00	0.00	Note 47
5	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.0	WBA	1.000	NO	1.000	0.66	0.66	0.0	0.0	0.0	0.0	0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
N leach	0.600	1.013	1.013	1.013	0	1.000	1.000	0.760	0.0	0.0	Eggs	4	4	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0200	0.00	0.0050	Note 49
Year N	43	0	0.0	0.0	0.0	100	229	1	0	0.0	43	0.0	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.00	0.00	Note 47
6	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.0	WRB	1.000	NO	1.000	0.84	0.84	0.0	0.0	0.0	0.0	0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
N leach	0.600	1.013	1.013	1.013	0	1.000	1.000	0.760	0.0	0.0	Eggs	4	4	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0200	0.00	0.0050	Note 49
Year N	43	0	0.0	0.0	0.0	100	11	0	0	0.0	43	0.0	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.00	0.00	Note 47
7	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.0	WWH	1.000	NO	1.000	0.67	0.67	0.0	0.0	0.0	0.0	0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
N leach	0.600	1.013	1.013	1.013	0	1.000	1.000	0.760	0.0	0.0	Eggs	4	4	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0200	0.00	0.0050	Note 49
Year N	43	0	0.0	0.0	0.0	100	11	0	0	0.0	43	0.0	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.00	0.00	Note 47
8	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.0	WWH	1.000	NO	1.000	0.67	0.67	0.0	0.0	0.0	0.0	0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
N leach	0.600	1.013	1.013	1.013	0	1.000	1.000	0.760	0.0	0.0	Eggs	4	4	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0200	0.00	0.0050	Note 49
Year N	43	0	0.0	0.0	0.0	100	1	0	0	0.0	43	0.0	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.00	0.00	Note 47
9	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.0	SBA	1.000	NO	1.000	0.65	0.65	0.0	0.0	0.0	0.0	0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
N leach	0.600	1.013	1.013	1.013	0	1.000	1.000	0.760	0.0	0.0	Eggs	4	4	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0200	0.00	0.0050	Note 49
Year N	43	0	0.0	0.0	0.0	100	10	0	0	0.0	43	0.0	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.00	0.00	Note 47
10	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.0	WBA	1.000	NO	1.000	0.66	0.66	0.0	0.0	0.0	0.0	0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
N leach	0.600	1.013	1.013	1.013	0	1.000	1.000	0.760	0.0	0.0	Eggs	4	4	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0200	0.00	0.0050	Note 49

Year Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9 Year 10 Total Total/year 1

Area with crop, ha 0.69 0.07 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.77 1.11

Possible additional non IPCC N2O-N emissions Value 0.0000  
 N residues emissions, ratio of N2O-N to N: 0.00  
 Increased soil N emissions, kg N2O-N/ha: 1.00  
 Natural background emissions, kg N2O-N/ha: 0.69  
 Total IPCC and non IPCC N2O 3.91  
 Total anthropogenic 3.91  
 Total including natural 4.68  
 Note 51 2.11 Note 51 2.11 Note 51 2.88 Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE Cereal Straw Crop Use Feeder: N crop Food/ Fuel/ Manure Final N2O-N emission  
 AND CONTINUING WITH MANURE FROM SCRAPING POULTRY TO PRODUCE TO PRODUCE benefit used leach 1/0 1/0 leach Name # # Uses #21-61 #71/ bev other handling N a- IPCC 1996  
 Name 1/0 Store Field 1/0 ganic propor # tion, % Name 1/0 1/0 Name Fed Food #72 #8 #9 # Name mounts Each Total

Year	Fertilizer/manure #	Store 1/0	Amounts Store	Field 1/0	Or-ganic 1/0	Nnorm propor 1/0	Crop #	Straw used 1/0	Use #	Feeder: Uses #21-61	N crop #71/	Food #72	Fuel/ bev #8	Manure #	Final N a-	N2O-N emission IPCC 1996	Total
Total N	RATIO OF N2O-N TO N IN FIRST CROP TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED																
Year N NH3	ACCORDING TO IPCC 1996 IPCC 2006																
1-10 N leach	FIRST YEAR 0.0858 0.0544																
TOTAL	TOTAL N AMOUNTS IN KG AND % LEACHED 0.1169 0.0720																

Year	N	Vol/NH3	N	NO	100.0	1	0	100.0	229	1	0	97.8	43	40.0	9.6	0.0	0.0	0.0	30.4	2.53	4.68	2.20	2.88
1	Vol/NH3	N	NO	100.0	1	0	97.8	43	40.0	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.4	2.53	4.68	2.20	2.88	
Year N leach	1.022	1.000	1.000	WRB	1.000	NO	57.8	Poultry	0.84	0.84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.05	0.05	0.05	
Year N leach	44	0	30.4	0	100	11	28.2	Eggs	4	5.5	1.3	0.0	0.0	0.0	0.0	0.0	0.0	4.1	0.48	1.07	0.41	0.61	
2	Vol/NH3	Poultry	NO	0.0	2.1	NON	100.00	WWH	1.000	NO	0	22.8	Poultry	0.67	0.67	0.0	0.0	0.0	0.0	0.02	0.125	0.02	0.100
Year N leach	Scrap	0.484	1.000	4.1	0	100	11	22.8	Eggs	4	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.57	0.200	0.17	0.200	
Year N leach	44	0	4.1	0	100	11	3.1	Poultry	0.67	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06	0.07	0.15	0.06	0.08	
3	Vol/NH3	Poultry	NO	0.0	0.3	NON	100.00	WWH	1.000	NO	0	3.1	Eggs	4	0.1	0.0	0.0	0.0	0.0	0.08	0.200	0.02	0.200
Year N leach	Scrap	0.484	1.000	0.6	0	100	1	3.1	Eggs	4	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.02	0.01	0.01	
Year N leach	44	0	0.6	0	100	1	0.4	Poultry	0.65	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.100	
4	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	SBA	1.000	NO	0	0.4	Eggs	4	0.0	0.0	0.0	0.0	0.0	0.01	0.200	0.00	0.200
Year N leach	Scrap	0.484	1.000	0.1	0	100	10	0.4	Eggs	4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
Year N leach	44	0	0.1	0	100	10	0.1	Poultry	0.66	0.66	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
5	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WBA	1.000	NO	0	0.1	Eggs	4	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.100
Year N leach	Scrap	0.484	1.000	0.0	0.0	NON	100.00	WBA	1.000	NO	0	0.1	Eggs	4	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.100
Year N leach	44	0	0.0	0.0	0.0	NON	100.00	WRB	1.000	NO	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
6	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WRB	1.000	NO	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.100
Year N leach	Scrap	0.484	1.000	0.0	0.0	NON	100.00	WRB	1.000	NO	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.100	
Year N leach	44	0	0.0	0.0	0.0	NON	100.00	WWH	1.000	NO	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.100	
7	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWH	1.000	NO	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.100
Year N leach	Scrap	0.484	1.000	0.0	0.0	NON	100.00	WWH	1.000	NO	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.100	
Year N leach	44	0	0.0	0.0	0.0	NON	100.00	WWH	1.000	NO	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.100	
8	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WWH	1.000	NO	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.100
Year N leach	Scrap	0.484	1.000	0.0	0.0	NON	100.00	WWH	1.000	NO	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.100	
Year N leach	44	0	0.0	0.0	0.0	NON	100.00	WBA	1.000	NO	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.100	
9	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	SBA	1.000	NO	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.100
Year N leach	Scrap	0.484	1.000	0.0	0.0	NON	100.00	SBA	1.000	NO	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.100	
Year N leach	44	0	0.0	0.0	0.0	NON	100.00	WBA	1.000	NO	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.100	
10	Vol/NH3	Poultry	NO	0.0	0.0	NON	100.00	WBA	1.000	NO	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.100
Year N leach	Scrap	0.484	1.000	0.0	0.0	NON	100.00	WBA	1.000	NO	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.100	
Year N leach	44	0	0.0	0.0	0.0	NON	100.00	WBA	1.000	NO	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.100	

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total	Total/year 1
Area with crop, ha	0.69	0.09	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	1.15
Possible additional non IPCC N2O-N emissions	Value	0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.68
N residues emissions, ratio of N2O-N to N:	Value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.88
Increased soil N emissions, kg N2O-N/ha:	Value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.88
Natural background emissions, kg N2O-N/ha:	Value	1.00	0.69	0.09	0.01	0.00	0.00	0.00	0.00	0.00	0.80	3.68

N CHAIN STARTING WITH N FERTILIZER AND CONTINUING WITH SHEEP DEEP LITTER TO PRODUCE Cereal benefit 1/0 TO PRODUCE Straw used 1/0 TO PRODUCE Cereal benefit 1/0 TO PRODUCE Fuel/ other #9 N crop Food/ bev #72 #71/ #8 WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR SHEEP MILK/MUTTON SHEEP MILK/MUTTON

Year Fertilizer/manure # Store Amounts Name 1/0 Store Field 1/0 Or-ganic 1/0 Nnorm propor tion, % Name # Crop use & leach Crop use # Name Use Fodder: Uses #21-61 Food Fed #9 Fuel/ other #9 Manure handling N a- # Name mounts Final N a- mounts N2O-N emission IPCC 1996 Each Total N2O-N emission IPCC 2006 Each Total

Total N	RATIO OF N2O-N TO N IN FIRST CROP										TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED									
Year 1-10 N leach	IPCC 1996					IPCC 2006					TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3					TOTAL N AMOUNTS IN KG AND % LEACHED				
	0.0865	0.1259	0.0639	0.0442	0.0639	0.0865	0.1259	0.0639	0.0442	0.0639	7.1	6.7	7.1	6.7	8.7	8.2	8.7	8.2	85.1	100.0
	0.0865	0.1259	0.0639	0.0442	0.0639	0.0865	0.1259	0.0639	0.0442	0.0639	7.1	6.7	7.1	6.7	8.7	8.2	8.7	8.2	85.1	100.0

N2O-N in food/beverage/fuel/other

Year 1	1	0	100.0	100.0	0	100	229	1	0	97.8	51	40.0	5.7	0.0	0.0	0.0	0.0	53	34.3	1.94	3.46	1.26	1.77	Note 47	
	Vol/NH3	N	NO	0.0	2.2	NON	100.00	WRB	1.000	NO	1.000	NO	0.84	0.0	Sheep	57.8	0.0	0.0	0.0	5.1	0.07	0.125	0.07	0.0100	Note 48
	N leach	1.022	1.000	0.0	0.591	0.0	0.591	0.0	0.0	57.8	Milk/multi	5	10.9	Deep	10.9	0.0	0.0	0.0	0.0	0.0	1.45	0.0200	0.43	0.0050	Note 49
Year 2	53	0	33.9	0.0	100	11	0.0	0.0	0.0	33.9	51	8.1	1.2	0.0	0.0	0.0	0.0	53	7.0	0.61	1.25	0.43	0.63	Note 47	
	Vol/NH3	Sheep	NO	0.0	0.0	NON	100.00	WWH	1.000	NO	1.000	NO	0.67	0.0	0.0	0.0	0.0	0.0	1.0	0.01	0.125	0.01	0.0100	Note 48	
	N leach	Deep	0.600	1.162	0.0	0.0	0.0	0.0	0.760	0.0	0.0	5	4.6	Deep	4.6	0.0	0.0	0.0	0.0	0.64	0.0200	0.19	0.0050	Note 49	
Year 3	53	0	6.9	0.0	100	11	0.0	0.0	0.0	6.9	51	1.7	0.2	0.0	0.0	0.0	0.0	53	1.4	0.12	0.26	0.09	0.13	Note 47	
	Vol/NH3	Sheep	NO	0.0	0.0	NON	100.00	WWH	1.000	NO	1.000	NO	0.67	0.0	0.0	0.0	0.0	0.0	0.2	0.00	0.125	0.00	0.0100	Note 48	
	N leach	Deep	0.600	1.162	0.0	0.0	0.0	0.0	0.760	0.0	0.0	5	0.9	Deep	0.9	0.0	0.0	0.0	0.0	0.13	0.0200	0.04	0.0050	Note 49	
Year 4	53	0	1.4	0.0	100	1	0.0	0.0	0.0	1.4	51	0.3	0.0	0.0	0.0	0.0	0.0	53	0.3	0.02	0.05	0.02	0.03	Note 47	
	Vol/NH3	Sheep	NO	0.0	0.0	NON	100.00	SBA	1.000	NO	1.000	NO	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.0100	Note 48	
	N leach	Deep	0.600	1.162	0.0	0.0	0.0	0.0	0.760	0.0	0.0	5	0.2	Deep	0.2	0.0	0.0	0.0	0.0	0.03	0.0200	0.01	0.0050	Note 49	
Year 5	53	0	0.3	0.0	100	10	0.0	0.0	0.0	0.3	51	0.1	0.0	0.0	0.0	0.0	0.0	53	0.1	0.01	0.01	0.00	0.01	Note 47	
	Vol/NH3	Sheep	NO	0.0	0.0	NON	100.00	WBA	1.000	NO	1.000	NO	0.66	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.0100	Note 48	
	N leach	Deep	0.600	1.162	0.0	0.0	0.0	0.0	0.760	0.0	0.0	5	0.0	Deep	0.0	0.0	0.0	0.0	0.0	0.01	0.0200	0.00	0.0050	Note 49	
Year 6	53	0	0.1	0.0	100	229	0.0	0.0	0.0	0.1	51	0.0	0.0	0.0	0.0	0.0	0.0	53	0.0	0.00	0.00	0.00	0.00	Note 47	
	Vol/NH3	Sheep	NO	0.0	0.0	NON	100.00	WRB	1.000	NO	1.000	NO	0.84	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.0100	Note 48	
	N leach	Deep	0.600	1.162	0.0	0.0	0.0	0.0	0.760	0.0	0.0	5	0.0	Deep	0.0	0.0	0.0	0.0	0.0	0.00	0.0200	0.00	0.0050	Note 49	
Year 7	53	0	0.0	0.0	100	11	0.0	0.0	0.0	0.0	51	0.0	0.0	0.0	0.0	0.0	0.0	53	0.0	0.00	0.00	0.00	0.00	Note 47	
	Vol/NH3	Sheep	NO	0.0	0.0	NON	100.00	WWH	1.000	NO	1.000	NO	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.0100	Note 48	
	N leach	Deep	0.600	1.162	0.0	0.0	0.0	0.0	0.760	0.0	0.0	5	0.0	Deep	0.0	0.0	0.0	0.0	0.0	0.00	0.0200	0.00	0.0050	Note 49	
Year 8	53	0	0.0	0.0	100	11	0.0	0.0	0.0	0.0	51	0.0	0.0	0.0	0.0	0.0	0.0	53	0.0	0.00	0.00	0.00	0.00	Note 47	
	Vol/NH3	Sheep	NO	0.0	0.0	NON	100.00	WWH	1.000	NO	1.000	NO	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.0100	Note 48	
	N leach	Deep	0.600	1.162	0.0	0.0	0.0	0.0	0.760	0.0	0.0	5	0.0	Deep	0.0	0.0	0.0	0.0	0.0	0.00	0.0200	0.00	0.0050	Note 49	
Year 9	53	0	0.0	0.0	100	1	0.0	0.0	0.0	0.0	51	0.0	0.0	0.0	0.0	0.0	0.0	53	0.0	0.00	0.00	0.00	0.00	Note 47	
	Vol/NH3	Sheep	NO	0.0	0.0	NON	100.00	SBA	1.000	NO	1.000	NO	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.0100	Note 48	
	N leach	Deep	0.600	1.162	0.0	0.0	0.0	0.0	0.760	0.0	0.0	5	0.0	Deep	0.0	0.0	0.0	0.0	0.0	0.00	0.0200	0.00	0.0050	Note 49	
Year 10	53	0	0.0	0.0	100	10	0.0	0.0	0.0	0.0	51	0.0	0.0	0.0	0.0	0.0	0.0	53	0.0	0.00	0.00	0.00	0.00	Note 47	
	Vol/NH3	Sheep	NO	0.0	0.0	NON	100.00	WBA	1.000	NO	1.000	NO	0.66	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.0100	Note 48	
	N leach	Deep	0.600	1.162	0.0	0.0	0.0	0.0	0.760	0.0	0.0	5	0.0	Deep	0.0	0.0	0.0	0.0	0.0	0.00	0.0200	0.00	0.0050	Note 49	

Year Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9 Year 10 Total Total/year 1

Area with crop, ha 0.69 0.13 0.03 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.85 1.23

Possible additional non IPCC N2O-N emissions Value 0.0000  
 N residues emissions, ratio of N2O-N to N: 0.00  
 Increased soil N emissions, kg N2O-N/ha: 1.00  
 Natural background emissions, kg N2O-N/ha: 0.69  
 Total IPCC and non IPCC N2O 5.04  
 Total anthropogenic 5.04  
 Total including natural 5.89  
 Note 51 2.56 Note 51 2.56 Note 51 3.41 Note 51









N CHAIN STARTING WITH N FERTILIZER AND CONTINUING WITH GREEN MANURE HIGH N TO PRODUCE CEREAL Straw used 1/0 TO PRODUCE WINTER RAPESEED FOR PROBIODIESEL AND WINTER WHEAT FOR HIGH N CROP CATTLE DAIRY

Year	Fertilizer/manure #	Store 1/0	Amounts 1/0	Field 1/0	Or-ganic 1/0	Nnorm propor 1/0	Crop #	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use #	Fodder: Uses #21-61	Food Fed	N crop #71-72	Fuel/ bev #8	Fuel/ other #9	Manure handling #	Final N a-	N2O-N emission IPCC 1996	N2O-N emission IPCC 2006	Total Each	Total
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Total N	RATIO OF N2O-N TO N IN FIRST CROP																					
Year	IPCC 1996											IPCC 2006										
1-10 N leach	0.0706											0.0392										
TOTAL	0.1022											0.0592										

N2O-N in food/beverage/fuel/other

Year	N	1	0	100.0	100.0	0	100	229	1	0	97.8	71	0.0	0.0	40.0	0.0	0.0	71	40.0	1.90	4.09	1.60	2.37
1	VoI/NH3 N leach	NO	0.0	2.2	NON	100.00	WRB	1.000	NO	1.000	NO	0.84	0.84	0.0	0.0	0.0	0.0	0.0	0.0	1.36	2.83	1.11	1.57
Year	N	71	0	40.0	0	100	11	0.591	0.0	0.591	0.0	71	71	10.9	High	0.0	10.9	High	0.0	0.02	0.0125	0.02	0.1000
2	VoI/NH3 N leach	Green High	0.0	10.0	NON	100.00	WWH	1.000	NO	1.000	NO	0.67	0.67	2.6	0.0	0.0	0.0	21	8.6	0.43	1.01	0.39	0.64
Year	N	21	0	8.0	ORG	1.00	1.000	0.627	0.0	0.627	0.0	2	2	4.1	Liquid	0.0	4.1	Liquid	0.0	0.47	0.0010	0.14	0.0050
3	VoI/NH3 N leach	Cattle Liquid	0.0	2.0	NON	100.00	WWH	1.000	NO	1.000	NO	0.67	0.67	0.8	Liquid	0.0	0.8	Liquid	0.0	0.02	0.0125	0.02	0.0100
Year	N	21	0	1.6	ORG	1.00	1.000	0.627	0.0	0.627	0.0	2	2	1.2	Dairy	0.0	1.2	Dairy	0.0	0.09	0.0010	0.03	0.0050
4	VoI/NH3 N leach	Cattle Liquid	0.0	0.4	NON	100.00	SBA	1.000	NO	1.000	NO	0.65	0.65	0.1	0.0	0.0	0.0	21	0.3	0.02	0.04	0.02	0.03
Year	N	21	0	0.3	ORG	1.00	1.000	0.627	0.0	0.627	0.0	2	2	0.2	Liquid	0.0	0.2	Liquid	0.0	0.02	0.0010	0.01	0.0050
5	VoI/NH3 N leach	Cattle Liquid	0.0	0.1	NON	100.00	WBA	1.000	NO	1.000	NO	0.66	0.66	0.0	0.0	0.0	0.0	21	0.0	0.00	0.0125	0.00	0.01
Year	N	21	0	0.0	ORG	1.00	1.000	0.627	0.0	0.627	0.0	2	2	0.0	Liquid	0.0	0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050
6	VoI/NH3 N leach	Cattle Liquid	0.0	0.0	NON	100.00	WRB	1.000	NO	1.000	NO	0.84	0.84	0.0	0.0	0.0	0.0	71	0.0	0.00	0.0125	0.00	0.01
Year	N	71	0	0.0	ORG	1.00	1.000	0.627	0.0	0.627	0.0	71	71	0.0	High	0.0	0.0	High	0.0	0.00	0.0000	0.00	0.0000
7	VoI/NH3 N leach	Green High	0.0	0.0	NON	100.00	WWH	1.000	NO	1.000	NO	0.67	0.67	0.0	0.0	0.0	0.0	21	0.0	0.00	0.0125	0.00	0.00
Year	N	21	0	0.0	ORG	1.00	1.000	0.627	0.0	0.627	0.0	2	2	0.0	Liquid	0.0	0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050
8	VoI/NH3 N leach	Cattle Liquid	0.0	0.0	NON	100.00	WWH	1.000	NO	1.000	NO	0.67	0.67	0.0	0.0	0.0	0.0	21	0.0	0.00	0.0125	0.00	0.00
Year	N	21	0	0.0	ORG	1.00	1.000	0.627	0.0	0.627	0.0	2	2	0.0	Liquid	0.0	0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050
9	VoI/NH3 N leach	Cattle Liquid	0.0	0.0	NON	100.00	SBA	1.000	NO	1.000	NO	0.65	0.65	0.0	0.0	0.0	0.0	21	0.0	0.00	0.0125	0.00	0.00
Year	N	21	0	0.0	ORG	1.00	1.000	0.627	0.0	0.627	0.0	2	2	0.0	Liquid	0.0	0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050
10	VoI/NH3 N leach	Cattle Liquid	0.0	0.0	NON	100.00	WBA	1.000	NO	1.000	NO	0.66	0.66	0.0	0.0	0.0	0.0	21	0.0	0.00	0.0125	0.00	0.00
Year	N	21	0	0.0	ORG	1.00	1.000	0.627	0.0	0.627	0.0	2	2	0.0	Liquid	0.0	0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050

Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Total
Area with crop, ha	0.69	0.23	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	1.42

Possible additional non IPCC N2O-N emissions  
 N residues emissions, ratio of N2O-N to N: 0.0000  
 Increased soil N emissions, kg N2O-N/ha: 0.00  
 Natural background emissions, kg N2O-N/ha: 1.00

Total IPCC and non IPCC N2O 4.09  
 Total anthropogenic 4.09  
 Total including natural 5.08

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE Cereal Straw Crop Fuel/ Fuel/ N2O-N emission N2O-N emission  
 AND CONTINUING WITH GREEN MANURE LOW N TO PRODUCE benefit used & use # Uses #21-61 #71/ bev other IPCC 1996 IPCC 2006  
 CATTLE DAIRY

Year Fertilizer/manure Or- Nnorm Crop Crop Fuel/ Fuel/ N2O-N emission N2O-N emission  
 # Store Amounts ganic propor # use & # Uses #21-61 #71/ bev other IPCC 1996 IPCC 2006  
 Name 1/0 Store Field 1/0 Name 1/0 leach use # Name Fed Food #72 #8 #9 # Name mounts Each Total Each Total

Total N	RATIO OF N2O-N TO N IN FIRST CROP TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED													
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3											
1-10 N leach	0.0706	0.0392	14.1	14.1										
TOTAL	0.1024	0.0579	84.1	84.0										
			TOTAL N AMOUNTS IN KG AND %											

N2O-N/N in food/beverage/fuel/other

Year	N	1	0	100.0	100.0	0	100	229	1	0	97.8	72	0.0	0.0	40.0	0.0	0.0	72	40.0	1.36	2.83	1.11	1.54	2.32	Note 45
1	Vol/NH3	N	NO	2.2	NON	100.00	WRB	1.000	NO	1.000	N crop	0.84	0.0	0.0	0.0	0.0	0.0	Green	0.0	0.02	0.0125	0.02	0.14	Note 45	
	N leach	1.022	1.000	ORG	1.00	1.000	0.591	0.0	0.0	57.8	low N	72	10.9	Low	0.0	0.0	0.0	1.45	0.0000	0.43	0.0000	0.63	Note 45		
Year	N	72	0	40.0	0	100	11	0	0	30.0	0.0	21	6.4	1.5	0.0	0.0	0.0	21	4.9	0.43	1.12	0.37	0.65	Note 47	
2	Vol/NH3	Green	NO	10.0	NON	100.00	WWH	1.000	NO	1.000	Cattle	0.67	0.0	0.0	0.0	0.0	0.0	Cattle	0.4	0.10	0.0125	0.10	0.0100	Note 48	
	N leach	Low	0.533	1.000	ORG	1.00	1.000	0.787	0.0	23.6	Dairy	2	4.1	Liquid	0.0	0.0	0.0	0.59	0.0010	0.18	0.0050	0.18	0.0050	Note 49	
Year	N	21	0	4.6	0	100	11	0	0	3.4	0.0	21	1.3	0.3	0.0	0.0	0.0	21	1.0	0.05	0.12	0.04	0.07	Note 47	
3	Vol/NH3	Cattle	NO	1.1	NON	100.00	WWH	1.000	NO	1.000	Cattle	0.67	0.0	0.0	0.0	0.0	0.0	Cattle	0.1	0.01	0.0125	0.01	0.0100	Note 48	
	N leach	Liquid	0.933	1.016	ORG	1.00	1.000	0.627	0.0	2.1	Dairy	2	0.5	Liquid	0.0	0.0	0.0	0.05	0.0010	0.02	0.0050	0.02	0.0050	Note 49	
Year	N	21	0	0.9	0	100	1	0	0	0.7	0.0	21	0.3	0.1	0.0	0.0	0.0	21	0.2	0.01	0.02	0.01	0.01	Note 47	
4	Vol/NH3	Cattle	NO	0.2	NON	100.00	SBA	1.000	NO	1.000	Cattle	0.65	0.0	0.0	0.0	0.0	0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48	
	N leach	Liquid	0.933	1.016	ORG	1.00	1.000	0.627	0.0	0.4	Dairy	2	0.1	Liquid	0.0	0.0	0.0	0.01	0.0010	0.00	0.0050	0.00	0.0050	Note 49	
Year	N	21	0	0.2	0	100	10	0	0	0.1	0.0	21	0.1	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47	
5	Vol/NH3	Cattle	NO	0.0	NON	100.00	WBA	1.000	NO	1.000	Cattle	0.66	0.0	0.0	0.0	0.0	0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48	
	N leach	Liquid	0.933	1.016	ORG	1.00	1.000	0.627	0.0	0.1	Dairy	2	0.0	Liquid	0.0	0.0	0.0	0.00	0.0010	0.00	0.0050	0.00	0.0050	Note 49	
Year	N	21	0	0.0	0	100	229	1	0	0.0	0.0	72	0.0	0.0	0.0	0.0	0.0	72	0.0	0.00	0.00	0.00	0.00	Note 47	
6	Vol/NH3	Cattle	NO	0.0	NON	100.00	WRB	1.000	NO	1.000	N crop	0.84	0.0	0.0	0.0	0.0	0.0	Green	0.0	0.00	0.0125	0.00	0.0100	Note 48	
	N leach	Liquid	0.933	1.016	ORG	1.00	1.000	0.627	0.0	0.0	low N	72	0.0	0.0	0.0	0.0	0.0	Low	0.0	0.00	0.0000	0.00	0.0000	Note 49	
Year	N	72	0	0.0	0	100	11	0	0	0.0	0.0	21	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47	
7	Vol/NH3	Green	NO	0.0	NON	100.00	WWH	1.000	NO	1.000	Cattle	0.67	0.0	0.0	0.0	0.0	0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48	
	N leach	Low	0.533	1.000	ORG	1.00	1.000	0.787	0.0	0.0	Dairy	2	0.0	Liquid	0.0	0.0	0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49	
Year	N	21	0	0.0	0	100	11	0	0	0.0	0.0	21	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47	
8	Vol/NH3	Cattle	NO	0.0	NON	100.00	WWH	1.000	NO	1.000	Cattle	0.67	0.0	0.0	0.0	0.0	0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48	
	N leach	Liquid	0.933	1.016	ORG	1.00	1.000	0.627	0.0	0.0	Dairy	2	0.0	Liquid	0.0	0.0	0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49	
Year	N	21	0	0.0	0	100	1	0	0	0.0	0.0	21	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47	
9	Vol/NH3	Cattle	NO	0.0	NON	100.00	SBA	1.000	NO	1.000	Cattle	0.65	0.0	0.0	0.0	0.0	0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48	
	N leach	Liquid	0.933	1.016	ORG	1.00	1.000	0.627	0.0	0.0	Dairy	2	0.0	Liquid	0.0	0.0	0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49	
Year	N	21	0	0.0	0	100	10	0	0	0.0	0.0	21	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47	
10	Vol/NH3	Cattle	NO	0.0	NON	100.00	WBA	1.000	NO	1.000	Cattle	0.66	0.0	0.0	0.0	0.0	0.0	Cattle	0.0	0.00	0.0125	0.00	0.0100	Note 48	
	N leach	Liquid	0.933	1.016	ORG	1.00	1.000	0.627	0.0	0.0	Dairy	2	0.0	Liquid	0.0	0.0	0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49	

Year Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9 Year 10 Total Total/year 1

Area with crop, ha 0.69 0.13 0.03 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.86 1.24 Note 50

Possible additional non IPCC N2O-N emissions Value  
 N residues emissions, ratio of N2O-N to N: 0.0000  
 Increased soil N emissions, kg N2O-N/ha: 0.00  
 Natural background emissions, kg N2O-N/ha: 1.00

Total IPCC and non IPCC N2O 4.09  
 Total anthropogenic 4.09  
 Total including natural 4.96

Kind of source  
 Current crops 2.32 Note 51  
 Total anthropogenic 2.32 Note 51  
 Total including natural 3.18 Note 51

N CHAIN STARTING WITH N FERTILIZER AND CONTINUING WITH NO MANURE TO PRODUCE Cereal benefit 1/0 Straw used 1/0 Crop use & leach 1/0

Year Fertilizer/manure # Store Amounts Field Name 1/0 Or-ganic 1/0 Nnorm propor-tion, % Name # Crop use & leach Use # Name Fed Fodder: Uses #21-61 Food #72 N crop #71/ bev #78 Fuel/ other #9 Manure handling # Name Final N a-mounts

Year		Fertilizer/manure # Store Amounts Field Name 1/0 Or-ganic 1/0 Nnorm propor-tion, % Name # Crop use & leach Use # Name Fed Fodder: Uses #21-61 Food #72 N crop #71/ bev #78 Fuel/ other #9 Manure handling # Name Final N a-mounts		N2O-N emission IPCC 1996 Each Total		N2O-N emission IPCC 2006 Each Total	
Total N	Year N NH3	1-10 N leach	RATIO OF N2O-N TO N IN FIRST CROP ACCORDING TO FIRST YEAR TOTAL		40.0	2.2	57.8
			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		40.0	2.2	57.8
			TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		2.2	2.2	57.8
			TOTAL N AMOUNTS IN KG AND % LEACHED		57.8	57.8	100.0
			TOTAL N AMOUNTS IN KG AND %		100.0	100.0	100.0

N2O-N in food/beverage/fuel/other

Year	N	1	0	100.0	100.0	0	100	229	1	0	97.8	8	0.0	0.0	40.0	0.0	0.0	1.36	2.83	1.11	1.57	Note 47
1	Vol/NH3	N	NO	2.2	NON	0	100.00	WRB	1.000	NO	57.8	Food/	0.84	0.0	NONE	0.0	0.0	0.02	0.0125	0.02	0.0100	Note 48
	N leach			1.022	1.000	0.0	1.00	1.000	0.591	0.0	57.8	beverage	8	10.9		0.0	0.0	1.45	0.0000	0.43	0.0000	Note 49
Year	N	0	0	0.0	0	100	11	1.000	1.000	NO	0.0	0	0.0	0.0	0	0.0	0.0	0.00	0.00	0.00	0.0000	Note 47
2	Vol/NH3	None	NO	0.0	NON	100.00	NO	1.000	1.000	NO	0.0	Food/	0.67	0.0	NONE	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach			1.000	1.000	0.0	1.00	1.000	0.600	0.0	0.0	beverage	8	0.0		0.0	0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0	100	11	1.000	1.000	NO	0.0	0	0.0	0.0	0	0.0	0.0	0.00	0.00	0.00	0.0000	Note 47
3	Vol/NH3	None	NO	0.0	NON	100.00	NO	1.000	1.000	NO	0.0	Food/	0.67	0.0	NONE	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach			1.000	1.000	0.0	1.00	1.000	0.600	0.0	0.0	beverage	8	0.0		0.0	0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0	100	1	1.000	1.000	NO	0.0	0	0.0	0.0	0	0.0	0.0	0.00	0.00	0.00	0.0000	Note 47
4	Vol/NH3	None	NO	0.0	NON	100.00	NO	1.000	1.000	NO	0.0	Food/	0.65	0.0	NONE	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach			1.000	1.000	0.0	1.00	1.000	0.600	0.0	0.0	beverage	8	0.0		0.0	0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0	100	10	1.000	1.000	NO	0.0	0	0.0	0.0	0	0.0	0.0	0.00	0.00	0.00	0.0000	Note 47
5	Vol/NH3	None	NO	0.0	NON	100.00	NO	1.000	1.000	NO	0.0	Food/	0.66	0.0	NONE	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach			1.000	1.000	0.0	1.00	1.000	0.600	0.0	0.0	beverage	8	0.0		0.0	0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0	100	229	1.000	1.000	NO	0.0	0	0.0	0.0	0	0.0	0.0	0.00	0.00	0.00	0.0000	Note 47
6	Vol/NH3	None	NO	0.0	NON	100.00	NO	1.000	1.000	NO	0.0	Food/	0.84	0.0	NONE	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach			1.000	1.000	0.0	1.00	1.000	0.600	0.0	0.0	beverage	8	0.0		0.0	0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0	100	11	1.000	1.000	NO	0.0	0	0.0	0.0	0	0.0	0.0	0.00	0.00	0.00	0.0000	Note 47
7	Vol/NH3	None	NO	0.0	NON	100.00	NO	1.000	1.000	NO	0.0	Food/	0.67	0.0	NONE	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach			1.000	1.000	0.0	1.00	1.000	0.600	0.0	0.0	beverage	8	0.0		0.0	0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0	100	11	1.000	1.000	NO	0.0	0	0.0	0.0	0	0.0	0.0	0.00	0.00	0.00	0.0000	Note 47
8	Vol/NH3	None	NO	0.0	NON	100.00	NO	1.000	1.000	NO	0.0	Food/	0.67	0.0	NONE	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach			1.000	1.000	0.0	1.00	1.000	0.600	0.0	0.0	beverage	8	0.0		0.0	0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0	100	1	1.000	1.000	NO	0.0	0	0.0	0.0	0	0.0	0.0	0.00	0.00	0.00	0.0000	Note 47
9	Vol/NH3	None	NO	0.0	NON	100.00	NO	1.000	1.000	NO	0.0	Food/	0.65	0.0	NONE	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach			1.000	1.000	0.0	1.00	1.000	0.600	0.0	0.0	beverage	8	0.0		0.0	0.0	0.00	0.0000	0.00	0.0000	Note 49
Year	N	0	0	0.0	0	100	10	1.000	1.000	NO	0.0	0	0.0	0.0	0	0.0	0.0	0.00	0.00	0.00	0.0000	Note 47
10	Vol/NH3	None	NO	0.0	NON	100.00	NO	1.000	1.000	NO	0.0	Food/	0.66	0.0	NONE	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach			1.000	1.000	0.0	1.00	1.000	0.600	0.0	0.0	beverage	8	0.0		0.0	0.0	0.00	0.0000	0.00	0.0000	Note 49

Year Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9 Year 10 Total Total/year 1

Area with crop, ha 0.69 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.69 1.00

Possible additional non IPCC N2O-N emissions Value 0.0000  
 N residues emissions, ratio of N2O-N to N: 0.00  
 Increased soil N emissions, kg N2O-N/ha: 1.00  
 Natural background emissions, kg N2O-N/ha: 0.69  
 Total IPCC and non IPCC N2O 2.83  
 Total anthropogenic 2.83  
 Total including natural 3.52  
 Note 51 1.57 Note 51 1.57 Note 51 2.26 Note 51





N CHAIN STARTING WITH N FERTILIZER TO PRODUCE Cereal Straw Crop Crop Fuel/ Fuel/ N2O-N emission N2O-N emission  
 AND CONTINUING WITH NO MANURE TO PRODUCE benefit used & use # Uses #21-61 #71/ bev other IPCC 1996 IPCC 2006  
 WASTE DUMPED IN FIELD AND LOST TO LEACH WASTE DUMPED IN FIELD

Year	Fertilizer/manure #	Store 1/0	Amounts Store Field 1/0	Or-ganic 1/0	Nnorm propor 1/0	Crop # Name	Use Name	Food Fed	Fodder: Uses #21-61	N crop #71/	Food #72	Food #8	Fuel/ other #9	Manure handling # Name	Final N a-mounts	Total	Total
RATIO OF N2O-N TO N IN FIRST CROP																	
TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED																	
Total N	100.0	0	100	229	1	0	97.8	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.36	3.83
Year 1-10	2.2	NON	100.00	WRB	1.000	NO	57.8	Waste	0.84	0.0	0.0	0.0	0.0	None	0.0	0.02	1.11
N leach	1.022	ORG	1.00	1.000	0.591	0.0	57.8	in field	0	10.9	0.0	0.0	0.0	0.0	40.0	2.45	0.73
Year 2	0.0	NON	100.00	NO	1.000	NO	0.0	Waste	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
N leach	1.000	ORG	1.00	1.000	0.600	0.0	0.0	in field	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
Year 3	0.0	NON	100.00	NO	1.000	NO	0.0	Waste	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
N leach	1.000	ORG	1.00	1.000	0.600	0.0	0.0	in field	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
Year 4	0.0	NON	100.00	NO	1.000	NO	0.0	Waste	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
N leach	1.000	ORG	1.00	1.000	0.600	0.0	0.0	in field	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
Year 5	0.0	NON	100.00	NO	1.000	NO	0.0	Waste	0.66	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
N leach	1.000	ORG	1.00	1.000	0.600	0.0	0.0	in field	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
Year 6	0.0	NON	100.00	NO	1.000	NO	0.0	Waste	0.84	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
N leach	1.000	ORG	1.00	1.000	0.600	0.0	0.0	in field	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
Year 7	0.0	NON	100.00	NO	1.000	NO	0.0	Waste	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
N leach	1.000	ORG	1.00	1.000	0.600	0.0	0.0	in field	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
Year 8	0.0	NON	100.00	NO	1.000	NO	0.0	Waste	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
N leach	1.000	ORG	1.00	1.000	0.600	0.0	0.0	in field	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
Year 9	0.0	NON	100.00	NO	1.000	NO	0.0	Waste	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
N leach	1.000	ORG	1.00	1.000	0.600	0.0	0.0	in field	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
Year 10	0.0	NON	100.00	NO	1.000	NO	0.0	Waste	0.66	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00
N leach	1.000	ORG	1.00	1.000	0.600	0.0	0.0	in field	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00

N2O-N in food/beverage/fuel/other

Year	Vol/NH3	N	1/0	100	229	1	0	97.8	0	0.0	0.0	0.0	0.0	0.0	0.0	1.36	3.83	1.11	1.87
Year 1	None	0	100.00	WRB	1.000	NO	57.8	Waste	0.84	0.0	0.0	0.0	0.0	None	0.0	0.02	0.125	0.02	0.100
N leach	1.000	ORG	1.00	1.000	0.591	0.0	57.8	in field	0	10.9	0.0	0.0	0.0	0.0	40.0	2.45	0.000	0.73	0.000
Year 2	None	0	100.00	NO	1.000	NO	0.0	Waste	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.000
N leach	1.000	ORG	1.00	1.000	0.600	0.0	0.0	in field	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.000	0.00	0.000
Year 3	None	0	100.00	NO	1.000	NO	0.0	Waste	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.000
N leach	1.000	ORG	1.00	1.000	0.600	0.0	0.0	in field	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.000	0.00	0.000
Year 4	None	0	100.00	NO	1.000	NO	0.0	Waste	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.000
N leach	1.000	ORG	1.00	1.000	0.600	0.0	0.0	in field	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.000	0.00	0.000
Year 5	None	0	100.00	NO	1.000	NO	0.0	Waste	0.66	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.000
N leach	1.000	ORG	1.00	1.000	0.600	0.0	0.0	in field	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.000	0.00	0.000
Year 6	None	0	100.00	NO	1.000	NO	0.0	Waste	0.84	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.000
N leach	1.000	ORG	1.00	1.000	0.600	0.0	0.0	in field	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.000	0.00	0.000
Year 7	None	0	100.00	NO	1.000	NO	0.0	Waste	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.000
N leach	1.000	ORG	1.00	1.000	0.600	0.0	0.0	in field	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.000	0.00	0.000
Year 8	None	0	100.00	NO	1.000	NO	0.0	Waste	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.000
N leach	1.000	ORG	1.00	1.000	0.600	0.0	0.0	in field	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.000	0.00	0.000
Year 9	None	0	100.00	NO	1.000	NO	0.0	Waste	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.000
N leach	1.000	ORG	1.00	1.000	0.600	0.0	0.0	in field	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.000	0.00	0.000
Year 10	None	0	100.00	NO	1.000	NO	0.0	Waste	0.66	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.125	0.00	0.000
N leach	1.000	ORG	1.00	1.000	0.600	0.0	0.0	in field	0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.000	0.00	0.000

Year Total/year 1

Area with crop, ha 0.69 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.69 1.00

Possible additional non IPCC N2O-N emissions Value 0.0000  
 N residues emissions, ratio of N2O-N to N: 0.00  
 Increased soil N emissions, kg N2O-N/ha: 1.00  
 Natural background emissions, kg N2O-N/ha: 0.69  
 Total including natural 4.52  
 Total IPCC and non IPCC N2O 3.83  
 Kind of source  
 Current crops 1.87  
 Total anthropogenic 1.87  
 Total including natural 2.56

SUMMARY CATTLE DAIRY

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER LIQUID CATTLE MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	CATTLE DAIRY CATTLE DAIRY	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		13.98 13.90	1.57
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	0.13	0.13
1-10 N leach	0.0719	0.0431	TOTAL N AMOUNTS IN KG AND % LEACHED	1.83	0.55
TOTAL	0.0927	0.0562	TOTAL N AMOUNTS IN KG AND %	100.52 100.00	Note 45 Note 45

N2O-N/N in food/beverage/fuel/other 0.2652 0.1608 Note 46

Area with crop, ha  
 Natural background emissions, kg N2O-N/ha:  
 Total/year 1  
 0.89 1.28  
 0.89 3.13 Note 51

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER SEPARATED CATTLE MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	CATTLE DAIRY CATTLE DAIRY	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		13.87 13.79	1.58
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	0.12	0.12
1-10 N leach	0.0780	0.0429	TOTAL N AMOUNTS IN KG AND % LEACHED	1.86	0.56
TOTAL	0.1012	0.0564	TOTAL N AMOUNTS IN KG AND %	100.53 100.00	Note 45 Note 45

N2O-N/N in food/beverage/fuel/other 0.2918 0.1627 Note 46

Area with crop, ha  
 Natural background emissions, kg N2O-N/ha:  
 Total/year 1  
 0.88 1.26  
 0.88 3.13 Note 51

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER CATTLE DEEP LITTER	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	CATTLE DAIRY CATTLE DAIRY	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		13.34 12.71	1.59
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	0.13	0.13
1-10 N leach	0.0843	0.0430	TOTAL N AMOUNTS IN KG AND % LEACHED	1.96	0.59
TOTAL	0.1115	0.0577	TOTAL N AMOUNTS IN KG AND %	104.96 100.00	Note 45 Note 45

N2O-N/N in food/beverage/fuel/other 0.3344 0.1730 Note 46

Area with crop, ha  
 Natural background emissions, kg N2O-N/ha:  
 Total/year 1  
 0.83 1.20  
 0.83 3.14 Note 51

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER MANURE FROM GRAZING CATTLE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	CATTLE DAIRY CATTLE DAIRY	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		13.19 13.19	2.12
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	0.04	0.04
1-10 N leach	0.0847	0.0533	TOTAL N AMOUNTS IN KG AND % LEACHED	2.06	0.62
TOTAL	0.1137	0.0697	TOTAL N AMOUNTS IN KG AND %	100.00 100.00	Note 45 Note 45

N2O-N/N in food/beverage/fuel/other 0.3447 0.2112 Note 46

Area with crop, ha  
 Natural background emissions, kg N2O-N/ha:  
 Total/year 1  
 0.79 1.14  
 0.79 3.58 Note 51



SUMMARY CATTLE BEEF

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER LIQUID CATTLE MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	CATTLE BEEF CATTLE BEEF	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		12.44 12.37	1.59 3.76
Year N NH3	IPCC 1996	IPCC 2006		13.91 13.83	0.14 0.14
1-10 N leach	0.0719	0.0432	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	74.20 73.80	0.56 0.56
TOTAL	0.0940	0.0572	TOTAL N AMOUNTS IN KG AND % LEACHED	100.55 100.00	
			TOTAL N AMOUNTS IN KG AND %		

N2O-N/N in food/beverage/fuel/other 0.3022 0.1839 Note 46

Area with crop, ha  
 Natural background emissions, kg N2O-N/ha:  
 Total/year 1  
 0.90 1.30  
 0.90 3.19 Note 51

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER SEPARATED CATTLE MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	CATTLE BEEF CATTLE BEEF	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		12.33 12.27	1.60 4.12
Year N NH3	IPCC 1996	IPCC 2006		12.96 12.89	0.13 0.13
1-10 N leach	0.0784	0.0431	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	75.27 74.85	0.56 0.56
TOTAL	0.1030	0.0574	TOTAL N AMOUNTS IN KG AND % LEACHED	100.56 100.00	
			TOTAL N AMOUNTS IN KG AND %		

N2O-N/N in food/beverage/fuel/other 0.3339 0.1862 Note 46

Area with crop, ha  
 Natural background emissions, kg N2O-N/ha:  
 Total/year 1  
 0.89 1.28  
 0.83 3.18 Note 51

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER CATTLE DEEP LITTER	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	CATTLE BEEF CATTLE BEEF	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		11.84 11.25	1.61 4.55
Year N NH3	IPCC 1996	IPCC 2006		13.84 13.16	0.14 0.14
1-10 N leach	0.0850	0.0432	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	79.56 75.60	0.60 0.60
TOTAL	0.1138	0.0587	TOTAL N AMOUNTS IN KG AND % LEACHED	105.24 100.00	
			TOTAL N AMOUNTS IN KG AND %		

N2O-N/N in food/beverage/fuel/other 0.3845 0.1985 Note 46

Area with crop, ha  
 Natural background emissions, kg N2O-N/ha:  
 Total/year 1  
 0.84 1.21  
 0.84 3.19 Note 51

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER MANURE FROM GRAZING CATTLE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	CATTLE BEEF CATTLE BEEF	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		11.70 11.70	2.18 4.64
Year N NH3	IPCC 1996	IPCC 2006		4.62 4.62	0.05 0.05
1-10 N leach	0.0854	0.0540	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	83.68 83.68	0.63 0.63
TOTAL	0.1161	0.0713	TOTAL N AMOUNTS IN KG AND % LEACHED	100.00 100.00	
			TOTAL N AMOUNTS IN KG AND %		

N2O-N/N in food/beverage/fuel/other 0.3968 0.2439 Note 46

Area with crop, ha  
 Natural background emissions, kg N2O-N/ha:  
 Total/year 1  
 0.80 1.15  
 0.80 3.65 Note 51

SUMMARY PIG PORK

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER LIQUID PIG MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	PIG PORK PIG PORK	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		19.67	1.44
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	11.92	0.12
1-10 N leach	0.0720	0.0426	TOTAL N AMOUNTS IN KG AND % LEACHED	68.40	0.51
TOTAL	0.0866	0.0518	TOTAL N AMOUNTS IN KG AND %	100.00	1.71
N2O-N/N in food/beverage/fuel/other				0.1760	0.1053
Area with crop, ha		Total/year 1			
Natural background emissions, kg N2O-N/ha:		0.84		1.21	Note 50
		0.84		4.30	2.91
N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER SEPARATED PIG MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	PIG PORK PIG PORK	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		19.15	1.42
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	12.60	0.13
1-10 N leach	0.0767	0.0427	TOTAL N AMOUNTS IN KG AND % LEACHED	68.77	0.52
TOTAL	0.0918	0.0515	TOTAL N AMOUNTS IN KG AND %	100.52	1.72
N2O-N/N in food/beverage/fuel/other				0.1917	0.1077
Area with crop, ha		Total/year 1			
Natural background emissions, kg N2O-N/ha:		0.81		1.17	Note 50
		0.81		4.49	2.88
N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER PIG DEEP LITTER	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	PIG PORK PIG PORK	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		19.17	1.41
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	14.51	0.15
1-10 N leach	0.0808	0.0429	TOTAL N AMOUNTS IN KG AND % LEACHED	68.86	0.52
TOTAL	0.0967	0.0519	TOTAL N AMOUNTS IN KG AND %	102.54	1.72
N2O-N/N in food/beverage/fuel/other				0.2017	0.1082
Area with crop, ha		Total/year 1			
Natural background emissions, kg N2O-N/ha:		0.82		1.18	Note 50
		0.82		4.68	2.89
N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER MANURE FROM ROOTING PIGS	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	PIG PORK PIG PORK	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		19.70	1.96
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	4.12	0.04
1-10 N leach	0.0823	0.0509	TOTAL N AMOUNTS IN KG AND % LEACHED	76.18	0.57
TOTAL	0.1054	0.0643	TOTAL N AMOUNTS IN KG AND %	100.00	1.90
N2O-N/N in food/beverage/fuel/other				0.2140	0.1307
Area with crop, ha		Total/year 1			
Natural background emissions, kg N2O-N/ha:		0.81		1.17	Note 50
		0.81		5.03	3.39

SUMMARY POULTRY MEAT

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER LIQUID POULTRY MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	POULTRY MEAT POULTRY MEAT	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		23.04	1.39
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	9.39	0.09
1-10 N leach	0.0716	0.0419	TOTAL N AMOUNTS IN KG AND % LEACHED	67.56	0.51
TOTAL	0.0843	0.0497	TOTAL N AMOUNTS IN KG AND %	100.00	100.00

N2O-N/N in food/beverage/fuel/other		0.1464	0.0863	Note 46
Area with crop, ha	Total/year 1			
Natural background emissions, kg N2O-N/ha:	0.80	1.16		Note 50
	0.80		4.18	2.79 Note 51

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER SEPARATED POULTRY MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	POULTRY MEAT POULTRY MEAT	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		22.56	1.34
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	11.68	0.12
1-10 N leach	0.0757	0.0423	TOTAL N AMOUNTS IN KG AND % LEACHED	65.76	0.49
TOTAL	0.0866	0.0487	TOTAL N AMOUNTS IN KG AND %	100.00	100.00

N2O-N/N in food/beverage/fuel/other		0.1536	0.0864	Note 46
Area with crop, ha	Total/year 1			
Natural background emissions, kg N2O-N/ha:	0.78	1.13		Note 50
	0.78		4.24	2.73 Note 51

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER POULTRY DEEP LITTER	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	POULTRY MEAT POULTRY MEAT	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		21.56	1.29
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	13.63	0.14
1-10 N leach	0.0785	0.0427	TOTAL N AMOUNTS IN KG AND % LEACHED	64.97	0.49
TOTAL	0.0876	0.0478	TOTAL N AMOUNTS IN KG AND %	100.16	100.00

N2O-N/N in food/beverage/fuel/other		0.1625	0.0886	Note 46
Area with crop, ha	Total/year 1			
Natural background emissions, kg N2O-N/ha:	0.74	1.07		Note 50
	0.74		4.24	2.65 Note 51

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER MANURE FROM SCRAPING POULTRY	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	POULTRY MEAT POULTRY MEAT	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		22.37	1.78
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	3.70	0.04
1-10 N leach	0.0804	0.0490	TOTAL N AMOUNTS IN KG AND % LEACHED	73.92	0.55
TOTAL	0.0989	0.0592	TOTAL N AMOUNTS IN KG AND %	100.00	100.00

N2O-N/N in food/beverage/fuel/other		0.1769	0.1059	Note 46
Area with crop, ha	Total/year 1			
Natural background emissions, kg N2O-N/ha:	0.76	1.09		Note 50
	0.76		4.72	3.13 Note 51

SUMMARY POULTRY EGGS

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER LIQUID POULTRY MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	POULTRY EGGS POULTRY EGGS	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		11.72 11.72	1.57 2.27
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	14.20 14.20	0.14 0.14
1-10 N leach	0.0721	0.0434	TOTAL N AMOUNTS IN KG AND % LEACHED	74.08 74.08	0.56 0.56
TOTAL	0.0935	0.0567	TOTAL N AMOUNTS IN KG AND %	100.00 100.00	
N2O-N/N in food/beverage/fuel/other				0.3191	0.1936
Area with crop, ha		Total/year 1			
Natural background emissions, kg N2O-N/ha:		0.87 1.26			Note 50
		0.87		4.61	3.14
N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER SEPARATED POULTRY MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	POULTRY EGGS POULTRY EGGS	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		11.31 11.31	1.48 2.19
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	17.79 17.79	0.18 0.18
1-10 N leach	0.0785	0.0440	TOTAL N AMOUNTS IN KG AND % LEACHED	70.90 70.90	0.53 0.53
TOTAL	0.0969	0.0548	TOTAL N AMOUNTS IN KG AND %	100.00 100.00	
N2O-N/N in food/beverage/fuel/other				0.3424	0.1937
Area with crop, ha		Total/year 1			Note 50
Natural background emissions, kg N2O-N/ha:		0.84 1.21			Note 51
		0.84		4.71	3.03
N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER POULTRY DEEP LITTER	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	POULTRY EGGS POULTRY EGGS	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		10.51 10.49	1.39 2.11
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	20.47 20.42	0.20 0.20
1-10 N leach	0.0828	0.0446	TOTAL N AMOUNTS IN KG AND % LEACHED	69.27 69.09	0.52 0.52
TOTAL	0.0977	0.0529	TOTAL N AMOUNTS IN KG AND %	100.26 100.00	
N2O-N/N in food/beverage/fuel/other				0.3716	0.2011
Area with crop, ha		Total/year 1			Note 50
Natural background emissions, kg N2O-N/ha:		0.77 1.11			Note 51
		0.77		4.68	2.88
N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER MANURE FROM SCRAPING POULTRY	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	POULTRY EGGS POULTRY EGGS	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		11.17 11.17	2.20 2.88
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	4.66 4.66	0.05 0.05
1-10 N leach	0.0858	0.0544	TOTAL N AMOUNTS IN KG AND % LEACHED	84.17 84.17	0.63 0.63
TOTAL	0.1169	0.0720	TOTAL N AMOUNTS IN KG AND %	100.00 100.00	
N2O-N/N in food/beverage/fuel/other				0.4189	0.2578
Area with crop, ha		Total/year 1			Note 50
Natural background emissions, kg N2O-N/ha:		0.80 1.15			Note 51
		0.80		5.48	3.68

SUMMARY SHEEP AND GOATS

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER SHEEP DEEP LITTER	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	SHEEP MILK/MUTTON SHEEP MILK/MUTTON	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		7.13 6.73 2.70	1.80
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	8.66 8.18 0.09	0.09
1-10 N leach	0.0865	0.0442	TOTAL N AMOUNTS IN KG AND % LEACHED	90.14 85.09 2.25	0.68
TOTAL	0.1259	0.0639	TOTAL N AMOUNTS IN KG AND %	105.93 100.00	

N2O-N/N in food/beverage/fuel/other 0.7062 0.3588 Note 46

Area with crop, ha  
 Natural background emissions, kg N2O-N/ha: Total/year 1 0.85 1.23 Note 50 3.41 Note 51 5.89

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER MANURE FROM GRAZING SHEEP	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	SHEEP MILK/MUTTON SHEEP MILK/MUTTON	Note 43 Note 43
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Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		6.72 6.72 2.71	1.56
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	5.04 5.04 0.05	0.05
1-10 N leach	0.0878	0.0392	TOTAL N AMOUNTS IN KG AND % LEACHED	88.24 88.24 2.21	0.66
TOTAL	0.1241	0.0567	TOTAL N AMOUNTS IN KG AND %	100.00 100.00	

N2O-N/N in food/beverage/fuel/other 0.7388 0.3377 Note 46

Area with crop, ha  
 Natural background emissions, kg N2O-N/ha: Total/year 1 0.82 1.18 Note 50 3.08 Note 51 5.78

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER GOAT DEEP LITTER	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	GOAT MILK/MEAT GOAT MILK/MEAT	Note 43 Note 43
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Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		4.58 4.32 2.54	1.67
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	19.30 18.22 0.19	0.19
1-10 N leach	0.0874	0.0444	TOTAL N AMOUNTS IN KG AND % LEACHED	82.06 77.46 2.05	0.62
TOTAL	0.1197	0.0620	TOTAL N AMOUNTS IN KG AND %	105.93 100.00	

N2O-N/N in food/beverage/fuel/other 1.0467 0.5419 Note 46

Area with crop, ha  
 Natural background emissions, kg N2O-N/ha: Total/year 1 0.85 1.23 Note 50 3.33 Note 51 5.64

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER MANURE FROM GRAZING GOATS	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	GOAT MILK/MEAT GOAT MILK/MEAT	Note 43 Note 43
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Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		4.59 4.59 2.79	2.02
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	5.22 5.22 0.05	0.05
1-10 N leach	0.0887	0.0483	TOTAL N AMOUNTS IN KG AND % LEACHED	90.19 90.19 2.25	0.68
TOTAL	0.1275	0.0686	TOTAL N AMOUNTS IN KG AND %	100.00 100.00	

N2O-N/N in food/beverage/fuel/other 1.1120 0.5985 Note 46

Area with crop, ha  
 Natural background emissions, kg N2O-N/ha: Total/year 1 0.82 1.19 Note 50 3.57 Note 51 5.92

SUMMARY N CROP

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER GREEN MANURE HIGH N	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	HIGH N CROP CATTLE DAIRY	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	3.29	3.28	1.60
Year N NH3	IPCC 1996	IPCC 2006	15.56	15.54	0.16
1-10 N leach	0.0706	0.0392	81.31	81.18	0.61
TOTAL	0.1022	0.0592	100.16	100.00	

N2O-N/N in food/beverage/fuel/other		1.2433	0.7199	Note 46
Area with crop, ha	Total/year 1	1.42		
Natural background emissions, kg N2O-N/ha:	0.99	5.08		Note 50 Note 51
	0.99			

N amount in reference crop year 2 after use of N crop as green manure, kg	11.20			Note 47
N amount in reference crop year 1 after synthetic N fertilizer, kg	40.00			Note 47
Relative value of green manure, %	28.00			

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER GREEN MANURE LOW N	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR	LOW N CROP CATTLE DAIRY	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	1.88	1.88	1.54
Year N NH3	IPCC 1996	IPCC 2006	14.12	14.11	0.14
1-10 N leach	0.0706	0.0392	84.09	84.02	0.63
TOTAL	0.1024	0.0579	100.09	100.00	

N2O-N/N in food/beverage/fuel/other		2.1790	1.2322	Note 46
Area with crop, ha	Total/year 1	1.24		
Natural background emissions, kg N2O-N/ha:	0.86	4.96		Note 50 Note 51
	0.86			

N amount in reference crop year 2 after use of N crop as green manure, kg	6.40			Note 47
N amount in reference crop year 1 after synthetic N fertilizer, kg	40.00			Note 47
Relative value of green manure, %	16.00			

SUMMARY FOOD, FUEL, AND WASTE

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER NO MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND NOTHING FOR	FOOD FOOD	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		40.00 40.00	1.36 2.83
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	2.20 2.20	0.02 0.02
1-10 N leach	0.0706	0.0392	TOTAL N AMOUNTS IN KG AND % LEACHED	57.80 57.80	0.43 0.43
TOTAL	0.0706	0.0392	TOTAL N AMOUNTS IN KG AND %	100.00 100.00	
N2O-N/N in food/beverage/fuel/other					0.0392 Note 46
Area with crop, ha		Total/year 1			
Natural background emissions, kg N2O-N/ha:		0.69 1.00			Note 50
		0.69		3.52	2.26 Note 51
N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER NO MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND NOTHING FOR	FUEL FUEL	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		40.00 40.00	1.36 2.83
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	2.20 2.20	0.02 0.02
1-10 N leach	0.0706	0.0392	TOTAL N AMOUNTS IN KG AND % LEACHED	57.80 57.80	0.43 0.43
TOTAL	0.0706	0.0392	TOTAL N AMOUNTS IN KG AND %	100.00 100.00	
N2O-N/N in food/beverage/fuel/other					0.0392 Note 46
Area with crop, ha		Total/year 1			
Natural background emissions, kg N2O-N/ha:		0.69 1.00			Note 50
		0.69		3.52	2.26 Note 51
N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER NO MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND NOTHING FOR	WASTE DUMPED ELSEWHERE WITHOUT LEACHING WASTE, DUMPED ELSEWHERE	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		40.00 40.00	1.36 2.83
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	2.20 2.20	0.02 0.02
1-10 N leach	0.0706	0.0392	TOTAL N AMOUNTS IN KG AND % LEACHED	57.80 57.80	0.43 0.43
TOTAL	0.0706	0.0392	TOTAL N AMOUNTS IN KG AND %	100.00 100.00	
N2O-N/N in food/beverage/fuel/other					No use Note 46
Area with crop, ha		Total/year 1			
Natural background emissions, kg N2O-N/ha:		0.69 1.00			Note 50
		0.69		3.52	2.26 Note 51
N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER NO MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR PPO/BIODIESEL AND NOTHING FOR	WASTE DUMPED IN FIELD AND LOST TO LEACH WASTE DUMPED IN FIELD	Note 43 Note 43
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		0.00 0.00	1.36 3.83
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	2.20 2.20	0.02 0.02
1-10 N leach	0.0956	0.0467	TOTAL N AMOUNTS IN KG AND % LEACHED	97.80 97.80	0.73 0.73
TOTAL	0.0956	0.0467	TOTAL N AMOUNTS IN KG AND %	100.00 100.00	
N2O-N/N in food/beverage/fuel/other					No use Note 46
Area with crop, ha		Total/year 1			
Natural background emissions, kg N2O-N/ha:		0.69 1.00			Note 50
		0.69		4.52	2.56 Note 51

SUMMARY CATTLE	RATIO OF N2O-N TO N IN FIRST CROP ACCORDING TO	IPCC 1996		IPCC 2006		N2O-N emission IPCC 1996	N2O-N emission IPCC 2006
		MIN	MAX	MIN	MAX		
	FIRST YEAR	0.0719	0.0854	0.0429	0.0540	3.71	4.64
	TOTAL	0.0927	0.1161	0.0562	0.0713	MIN	MAX

N2O-N/N in food/beverage/fuel/other

Natural background emissions in kg N2O-N/ha, area with crop in ha, and total emissions in kg N2O-N/ha:

MIN	MAX	MIN	MAX
0.79	0.90	0.79	1.15
4.59	5.44	3.13	3.65
0.2652	0.3968	0.1608	0.2439

SUMMARY PIGS	RATIO OF N2O-N TO N IN FIRST CROP ACCORDING TO	IPCC 1996		IPCC 2006		N2O-N emission IPCC 1996	N2O-N emission IPCC 2006
		MIN	MAX	MIN	MAX		
	FIRST YEAR	0.0720	0.0823	0.0426	0.0509	3.46	4.22
	TOTAL	0.0866	0.1054	0.0515	0.0643	MIN	MAX

N2O-N/N in food/beverage/fuel/other

Natural background emissions in kg N2O-N/ha, area with crop in ha, and total emissions in kg N2O-N/ha:

MIN	MAX	MIN	MAX
0.81	0.84	0.81	0.84
4.30	5.03	2.88	3.39
0.1760	0.2140	0.1053	0.1307

SUMMARY POULTRY	RATIO OF N2O-N TO N IN FIRST CROP ACCORDING TO	IPCC 1996		IPCC 2006		N2O-N emission IPCC 1996	N2O-N emission IPCC 2006
		MIN	MAX	MIN	MAX		
	FIRST YEAR	0.0716	0.0858	0.0419	0.0544	3.37	4.68
	TOTAL	0.0843	0.1169	0.0478	0.0720	MIN	MAX

N2O-N/N in food/beverage/fuel/other

Natural background emissions in kg N2O-N/ha, area with crop in ha, and total emissions in kg N2O-N/ha:

MIN	MAX	MIN	MAX
0.74	0.87	0.74	0.87
4.18	5.48	2.65	3.68
0.1464	0.4189	0.0863	0.2578

SUMMARY SHEEP AND GOATS	RATIO OF N2O-N TO N IN FIRST CROP ACCORDING TO	IPCC 1996		IPCC 2006		N2O-N emission IPCC 1996	N2O-N emission IPCC 2006
		MIN	MAX	MIN	MAX		
	FIRST YEAR	0.0865	0.0887	0.0392	0.0483	4.79	5.1
	TOTAL	0.1197	0.1275	0.0567	0.0686	MIN	MAX

N2O-N/N in food/beverage/fuel/other

Natural background emissions in kg N2O-N/ha, area with crop in ha, and total emissions in kg N2O-N/ha:

MIN	MAX	MIN	MAX
0.82	0.85	0.82	0.85
5.64	5.92	3.08	3.57
0.7062	1.1120	0.3377	0.5985

SUMMARY FODDER	RATIO OF N2O-N TO N IN FIRST CROP ACCORDING TO	IPCC 1996		IPCC 2006		N2O-N emission IPCC 1996	N2O-N emission IPCC 2006
		MIN	MAX	MIN	MAX		
	FIRST YEAR	0.0716	0.0887	0.0392	0.0544	3.37	5.10
	TOTAL	0.0843	0.1275	0.0478	0.0720	MIN	MAX

N2O-N/N in food/beverage/fuel/other

Natural background emissions in kg N2O-N/ha, area with crop in ha, and total emissions in kg N2O-N/ha:

MIN	MAX	MIN	MAX
0.74	0.90	0.74	1.15
4.18	5.92	2.65	3.68
0.1464	1.1120	0.0863	0.5985