

Crop, fodder/food	WRS	WWH	WWB	WBA	WYE	TRI	SBA	SWH	OAT	MCC	MCW	GRO	GCR	GHP	GRP	CGR0	CONC
Crop #	22	11	13	10	14	16	1	2	3	5	216	263	260	2520	252	2610	9999
<NUE/e>	0.64	0.64	0.54	0.60	0.59	0.53	0.60	0.58	0.73	0.62	1.05	0.83	1.33	11.68	0.44	0.81	1.00
N digestibility, crop/crop part with N	0.84	0.67	0.68	0.66	0.62	0.65	0.65	0.67	0.64	0.62	0.63	0.78	0.80	0.80	0.66	0.78	0.80
<NUE/e> addition before cereal	0.07	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	0.00
<NUE/e> addition from straw	0.15	0.11	0.09	0.12	0.17	0.13	0.12	0.07	0.13	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	118	118	93	140	160	309	199	21	132	132	-87

Crop, PPO/biodiesel/bioethanol	WRB	WWHB	WWBB	WBB	RYB	TRB	SBB	SWB	OAB	MCB
Crop #	229	119	139	109	149	169	19	29	39	59
<NUE/e>	0.64	0.64	0.54	0.60	0.59	0.53	0.60	0.58	0.73	0.62
N digestibility, crop part with N	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	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<NUE/e> addition from straw	0.15	0.11	0.09	0.12	0.17	0.13	0.12	0.07	0.13	0.00
Recalculated N norm, kg N/ha	144	157	198	147	117	141	118	118	93	140

<NUE/e> amounts from crop res	0.03	0.11	0.09	0.08	0.15	0.12	0.09	0.12	0.11	0.21	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	0.47	11.96	0.00	0.00	-4.05

Manure/fertilizer kind, #	None	0	1	2	2	2	2	2	3	3	3	3	3	4	4	4	4	5	5	6	6	71	72	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	Deep	high N	low 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	1.000	0	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	0.150	0.000	0.150	0.000	0.150	0.450	0.450	0.450	0.450	0.000	0.000	0.000	0	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	0.150	0.450	0.450	0.450	0.000	0.000	0.000	0	0
% use of field store																										
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	0.250	0	0
N efficiency	0.000	1.000	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	0.650	0.650	0.650	0.650	0.650	0.650	0.650	0.650	0.650	0.400	0.400
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	0.867	0.867	0.867	0.867	0.867	0.867	0.867	0.867	0.867	0.867	0.867	0.867	0.867	0.533	0.533

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	NON	0.264	0.227	0.510	0.241	0.142	0.096	0.096	0.096	0.096	0.096
Fodder to food	N eff	ORG	0.264	0.146	0.328	0.272	0.142	0.096	0.096	0.096	0.096	0.096
Fodder to food	ND eff	NON	0.351	0.310	0.328	0.272	0.142	0.096	0.096	0.096	0.096	0.096
Fodder to food	ND eff	ORG	0.351	0.199	0.328	0.272	0.142	0.096	0.096	0.096	0.096	0.096

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





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

Year	Fertilizer/manure #	Store 1/0	Amounts Store	Field 1/0	Or-ganic 1/0	Nnorm propor-tion, %	Crop #	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use #	Fodder: Uses #21-61 Fed	N crop #71/72	Fuel/other #9	Manure handling #	Final N a-mounts	N2O-N emission IPCC 1996	Total	N2O-N emission IPCC 2006	Total	
Total N																					
Year 1-10	N leach																				
RATIO OF N2O-N TO N IN FIRST CROP ACCORDING TO FIRST YEAR TOTAL IPCC 1996: 0.0298, 0.0522, 0.0163, 0.0289 IPCC 2006: 0.0163, 0.0289, 0.0163, 0.0289 TOTAL: 0.0298, 0.0522, 0.0163, 0.0289																					

N2O-N in food/beverage/fuel/other

Year	Vol/NH3	N	NO	100.0	1	0	100.0	22	1	1	97.8	21	71.3	21.0	0.0	0.0	14.5	23	50.2	2.20	2.56	1.25	1.39
Year 1	Vol/NH3	N	NO	100.0	1	0	100.0	22	1	1	97.8	21	71.3	21.0	0.0	0.0	14.5	23	50.2	2.20	2.56	1.25	1.39
Year 2	Vol/NH3	N	NO	100.0	1	0	100.0	22	1	1	97.8	21	71.3	21.0	0.0	0.0	14.5	23	50.2	2.20	2.56	1.25	1.39
Year 3	Vol/NH3	N	NO	100.0	1	0	100.0	22	1	1	97.8	21	71.3	21.0	0.0	0.0	14.5	23	50.2	2.20	2.56	1.25	1.39
Year 4	Vol/NH3	N	NO	100.0	1	0	100.0	22	1	1	97.8	21	71.3	21.0	0.0	0.0	14.5	23	50.2	2.20	2.56	1.25	1.39
Year 5	Vol/NH3	N	NO	100.0	1	0	100.0	22	1	1	97.8	21	71.3	21.0	0.0	0.0	14.5	23	50.2	2.20	2.56	1.25	1.39
Year 6	Vol/NH3	N	NO	100.0	1	0	100.0	22	1	1	97.8	21	71.3	21.0	0.0	0.0	14.5	23	50.2	2.20	2.56	1.25	1.39
Year 7	Vol/NH3	N	NO	100.0	1	0	100.0	22	1	1	97.8	21	71.3	21.0	0.0	0.0	14.5	23	50.2	2.20	2.56	1.25	1.39
Year 8	Vol/NH3	N	NO	100.0	1	0	100.0	22	1	1	97.8	21	71.3	21.0	0.0	0.0	14.5	23	50.2	2.20	2.56	1.25	1.39
Year 9	Vol/NH3	N	NO	100.0	1	0	100.0	22	1	1	97.8	21	71.3	21.0	0.0	0.0	14.5	23	50.2	2.20	2.56	1.25	1.39
Year 10	Vol/NH3	N	NO	100.0	1	0	100.0	22	1	1	97.8	21	71.3	21.0	0.0	0.0	14.5	23	50.2	2.20	2.56	1.25	1.39
Year	Vol/NH3	N	NO	100.0	1	0	100.0	22	1	1	97.8	21	71.3	21.0	0.0	0.0	14.5	23	50.2	2.20	2.56	1.25	1.39

Area with crop, ha

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	0.77	0.20	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.35

Possible additional non N residues emissions, ratio of N2O-N to N: Increased soil N emissions, kg N2O-N/ha: Natural background emissions, kg N2O-N/ha:	Value	Kind of source	Total IPCC and non IPCC N2O
Possible additional non N residues emissions, ratio of N2O-N to N:	0.0000	Current crops	4.47
Increased soil N emissions, kg N2O-N/ha:	0.00	Total anthropogenic	4.47
Natural background emissions, kg N2O-N/ha:	1.00	Total including natural	5.52

Note 43  
Note 43  
Note 44  
Note 44  
Note 44  
Note 45  
Note 45  
Note 46  
Note 47  
Note 48  
Note 49  
Note 48  
Note 49  
Note 47  
Note 48  
Note 49  
Note 47  
Note 48  
Note 49  
Note 47  
Note 48  
Note 49  
Note 47  
Note 48  
Note 49  
Note 47  
Note 48  
Note 49  
Note 47  
Note 48  
Note 49  
Note 50  
Note 51  
Note 51  
Note 51  
Note 51

N CHAIN STARTING WITH AND CONTINUING WITH N FERTILIZER MANURE FROM GRAZING CATTLE TO PRODUCE CEREAL benefit TO PRODUCE TO PRODUCE WINTER RAPESEED FOR OIL AND WINTER WHEAT FOR CATTLE DAIRY CATTLE DAIRY

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

Table with 2 columns: Year, Fertilizer/manure # Store Amounts Name 1/0 Store Field 1/0 Or-ganic 1/0 Nnorm Crop # Ncrop Crop #71/ #72 1/0 Fuel/ other #9 Manure Final handling N a- # Name mounts N2O-N emission IPCC 1996 N2O-N emission IPCC 2006 Total Each Total

N2O-N in food/beverage/fuel/other

Main data table with 10 columns: Year, N leach, N leach, N leach, N leach, N leach, N leach, N leach, N leach, N leach. Rows 1-10 showing various values for each category.

Year Area with crop, ha Possible additional non N residues emissions, ratio of N2O-N to N: Increased soil N emissions, kg N2O-N/ha: Natural background emissions, kg N2O-N/ha:

Year Area with crop, ha Possible additional non N residues emissions, ratio of N2O-N to N: Increased soil N emissions, kg N2O-N/ha: Natural background emissions, kg N2O-N/ha:

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

Year Fertilizer/manure Or- Nnorm Crop Straw Cereal use & Crop Fuel/ Manure Final N2O-N emission  
 # Store Amounts Field 1/0 benefit used leach use # #71/ bev other handling N a- IPCC 1996  
 Name 1/0 Store Field 1/0 1/0 1/0 1/0 Name Fed Uses #21-61 #72 #8 #9 # Name amounts Each Total Each Total

Year 1: Fertilizer/manure Name: 1/0 Store: 1.022, Field: 0, benefit: 1.113, used: YES, leach: 1.0, crop: WRS, fuel: 0.0, other: 0.0, handling: 0.0, N2O-N emission: 0.27

Year 2: Fertilizer/manure Name: 21, Store: 0, Field: 49.3, benefit: 1.113, used: 1, leach: 1.0, crop: WWH, fuel: 0.0, other: 0.0, handling: 21, N2O-N emission: 0.27

Year 3: Fertilizer/manure Name: 21, Store: 0, Field: 16.4, benefit: 1.000, used: 4.1, leach: 1.0, crop: WWH, fuel: 0.0, other: 0.0, handling: 21, N2O-N emission: 0.31

Year 4: Fertilizer/manure Name: 21, Store: 0, Field: 5.5, benefit: 1.000, used: 1.4, leach: 1.0, crop: SBA, fuel: 0.0, other: 0.0, handling: 21, N2O-N emission: 0.11

Year 5: Fertilizer/manure Name: 21, Store: 0, Field: 1.7, benefit: 1.000, used: 0.5, leach: 1.0, crop: WBA, fuel: 0.0, other: 0.0, handling: 21, N2O-N emission: 0.03

Year 6: Fertilizer/manure Name: 21, Store: 0, Field: 0.5, benefit: 1.113, used: 0.1, leach: 1.0, crop: WRS, fuel: 0.0, other: 0.0, handling: 21, N2O-N emission: 0.01

Year 7: Fertilizer/manure Name: 21, Store: 0, Field: 0.2, benefit: 1.000, used: 0, leach: 1.0, crop: WWH, fuel: 0.0, other: 0.0, handling: 21, N2O-N emission: 0.00

Year 8: Fertilizer/manure Name: 21, Store: 0, Field: 0.0, benefit: 1.000, used: 0, leach: 1.0, crop: WWH, fuel: 0.0, other: 0.0, handling: 21, N2O-N emission: 0.00

Year 9: Fertilizer/manure Name: 21, Store: 0, Field: 0.0, benefit: 1.000, used: 0, leach: 1.0, crop: SBA, fuel: 0.0, other: 0.0, handling: 21, N2O-N emission: 0.00

Year 10: Fertilizer/manure Name: 21, Store: 0, Field: 0.0, benefit: 1.000, used: 1, leach: 1.0, crop: WBA, fuel: 0.0, other: 0.0, handling: 21, N2O-N emission: 0.00

N2O-N in food/beverage/fuel/other

Year 1: Fertilizer/manure Name: 1, Store: 0, Field: 100.0, benefit: 1.113, used: YES, leach: 1, crop: WRS, fuel: 0.0, other: 0.0, handling: 21, N2O-N emission: 1.26

Year 2: Fertilizer/manure Name: 21, Store: 0, Field: 49.3, benefit: 1.000, used: 1, leach: 1, crop: WWH, fuel: 0.0, other: 0.0, handling: 21, N2O-N emission: 1.67

Year 3: Fertilizer/manure Name: 21, Store: 0, Field: 16.4, benefit: 1.000, used: 4.1, leach: 1, crop: WWH, fuel: 0.0, other: 0.0, handling: 21, N2O-N emission: 1.31

Year 4: Fertilizer/manure Name: 21, Store: 0, Field: 5.5, benefit: 1.000, used: 1.4, leach: 1, crop: SBA, fuel: 0.0, other: 0.0, handling: 21, N2O-N emission: 0.05

Year 5: Fertilizer/manure Name: 21, Store: 0, Field: 1.7, benefit: 1.000, used: 0.5, leach: 1, crop: WBA, fuel: 0.0, other: 0.0, handling: 21, N2O-N emission: 0.03

Year 6: Fertilizer/manure Name: 21, Store: 0, Field: 0.5, benefit: 1.113, used: 0.1, leach: 1, crop: WRS, fuel: 0.0, other: 0.0, handling: 21, N2O-N emission: 0.01

Year 7: Fertilizer/manure Name: 21, Store: 0, Field: 0.2, benefit: 1.000, used: 0, leach: 1, crop: WWH, fuel: 0.0, other: 0.0, handling: 21, N2O-N emission: 0.00

Year 8: Fertilizer/manure Name: 21, Store: 0, Field: 0.0, benefit: 1.000, used: 0, leach: 1, crop: WWH, fuel: 0.0, other: 0.0, handling: 21, N2O-N emission: 0.00

Year 9: Fertilizer/manure Name: 21, Store: 0, Field: 0.0, benefit: 1.000, used: 0, leach: 1, crop: SBA, fuel: 0.0, other: 0.0, handling: 21, N2O-N emission: 0.00

Year 10: Fertilizer/manure Name: 21, Store: 0, Field: 0.0, benefit: 1.000, used: 1, leach: 1, crop: WBA, fuel: 0.0, other: 0.0, handling: 21, N2O-N emission: 0.00

Area with crop, ha

Year 1: Area with crop, ha: 0.77, Year 2: 0.29, Year 3: 0.10, Year 4: 0.04, Year 5: 0.01, Year 6: 0.00, Year 7: 0.00, Year 8: 0.00, Year 9: 0.00, Year 10: 0.00, Total/year 1: 1.57

Possible additional non IPCC N2O-N emissions: 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: 1.00

Total IPCC and non IPCC N2O: 3.07  
 Total anthropogenic: 3.07  
 Total including natural: 4.28



N CHAIN STARTING WITH N FERTILIZER TO PRODUCE TO PRODUCE TO PRODUCE  
AND CONTINUING WITH CATTLE DEEP LITTER WINTER RAPESEED FOR OIL AND WINTER WHEAT FOR CATTLE BEEF CATTLE BEEF

Year	Fertilizer/manure #	Store	Amounts	Name	Field	1/0	Or-ganic	Nnorm	Crop	Cereal	Staw	Crop	Use	Fooder:	N crop	Fuel/	Fuel/	Manure	Final	N2O-N emission	Each	Total	IPCC 2006	N2O-N emission	Each	Total	IPCC 1996	Each	Total
		1/0		1/0		1/0	1/0	%	leach	benefit	used	use &	#	Uses #21-61	#71/	#9	#8	# Name	N a-	emission	Total	2006	emission	Total	1996	Total			

Total N	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED																											
Year	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3																											
1-10 N leach	TOTAL N AMOUNTS IN KG AND % LEACHED																											

Year	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED																											
N2O-N in food/beverage/fuel/other																												
Year	N	1	0	100.0	100.0	0	100	22	1	1	97.8	22	71.3	18.6	0.0	0.0	14.5	23	52.7	2.25	2.61	1.26	2.61	3.37	4.65	2.00	2.56	Note 45
1	Vol/NH3	N	NO	0.0	0.0	2.2	NON	100.00	WRS	1.113	YES	12.0	Cattle	0.84	0.0	0.0	0.0	0.0	0.0	3.2	0.05	0.0125	0.05	0.0100	Note 48	2.00	2.56	Note 45
	N leach			1.000	1.000	1.022	ORG	1.00	1.113	0.271	14.5	12.0	Beef	2	3.0	3.0	0.0	0.0	0.0	0.0	0.30	0.0200	0.09	0.0050	Note 49	0.26	0.31	Note 45
Year 2	Vol/NH3	Cattle	NO	0.0	0.0	57.5	0	100	11	0	1	43.1	0	16.6	3.4	0.0	0.0	4.8	23	13.2	0.84	1.54	0.55	0.87	Note 47	1.02	1.02	Note 45
	N leach	Deep		1.159	1.159	14.4	NON	100.00	WWH	1.000	YES	21.7	Cattle	0.67	0.0	0.0	0.0	0.0	0.0	0.8	0.15	0.0125	0.15	0.0100	Note 48	0.26	0.26	Note 45
Year 3	Vol/NH3	Cattle	NO	0.0	0.0	14.3	0	100	11	0	1	10.8	0	4.1	0.9	0.0	0.0	1.2	23	3.3	0.21	0.38	0.16	0.0050	Note 49	1.02	1.02	Note 45
	N leach	Deep		1.159	1.159	3.6	NON	100.00	WWH	1.000	YES	5.4	Cattle	0.67	0.0	0.0	0.0	0.0	0.0	0.2	0.04	0.0125	0.04	0.0100	Note 48	1.02	1.02	Note 45
Year 4	Vol/NH3	Cattle	NO	0.0	0.0	3.6	0	100	1	0	1	2.7	0	1.0	0.2	0.0	0.0	0.3	23	0.8	0.05	0.10	0.03	0.0050	Note 49	1.02	1.02	Note 45
	N leach	Deep		1.159	1.159	0.9	NON	100.00	SBA	1.000	YES	1.4	Cattle	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0125	0.01	0.0100	Note 48	1.02	1.02	Note 45
Year 5	Vol/NH3	Cattle	NO	0.0	0.0	0.8	0	100	10	0	1	0.6	0	0.2	0.0	0.0	0.0	0.1	23	0.2	0.01	0.02	0.01	0.01	Note 47	1.02	1.02	Note 45
	N leach	Deep		1.159	1.159	0.2	NON	100.00	WBA	1.000	YES	0.3	Cattle	0.66	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48	1.02	1.02	Note 45
Year 6	Vol/NH3	Cattle	NO	0.0	0.0	0.2	0	100	22	1	1	0.1	0	0.1	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.0050	Note 49	1.02	1.02	Note 45
	N leach	Deep		1.159	1.159	0.0	NON	100.00	WRS	1.113	YES	0.1	Cattle	0.84	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48	1.02	1.02	Note 45
Year 7	Vol/NH3	Cattle	NO	0.0	0.0	0.1	0	100	11	0	1	0.0	0	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.0050	Note 49	1.02	1.02	Note 45
	N leach	Deep		1.159	1.159	0.0	NON	100.00	WWH	1.000	YES	0.0	Cattle	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48	1.02	1.02	Note 45
Year 8	Vol/NH3	Cattle	NO	0.0	0.0	0.0	0	100	11	0	1	0.0	0	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.0050	Note 49	1.02	1.02	Note 45
	N leach	Deep		1.159	1.159	0.0	NON	100.00	WWH	1.000	YES	0.0	Cattle	0.67	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48	1.02	1.02	Note 45
Year 9	Vol/NH3	Cattle	NO	0.0	0.0	0.0	0	100	1	0	1	0.0	0	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.0050	Note 49	1.02	1.02	Note 45
	N leach	Deep		1.159	1.159	0.0	NON	100.00	SBA	1.000	YES	0.0	Cattle	0.65	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48	1.02	1.02	Note 45
Year 10	Vol/NH3	Cattle	NO	0.0	0.0	0.0	0	100	10	0	1	0.0	0	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	0.0050	Note 49	1.02	1.02	Note 45
	N leach	Deep		1.159	1.159	0.0	NON	100.00	WBA	1.000	YES	0.0	Cattle	0.66	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48	1.02	1.02	Note 45

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	0.77	0.21	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.06	1.38

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

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

Total IPCC and non IPCC N2O  
4.65  
4.65  
5.72

Note 50  
Note 51  
2.56 Note 51  
2.56 Note 51  
3.62 Note 51



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

Year Fertilizer/manure N crop Food/ Fuel/ Manure Final N2O-N emission  
 # Store Amounts #71/ be v other handling N a- N2O-N emission  
 Name 1/0 Store Field 1/0 Or- Nnorm Crop Crop use & Straw Cereal benefit 1/0 1/0 1/0 Name Fed Uses #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									
1-10 N leach	0.0307	0.0254	TOTAL N AMOUNTS IN KG AND % LEACHED									
TOTAL	0.0559	0.0413	TOTAL N AMOUNTS IN KG AND %									

N2O-N in food/beverage/fuel/other 0.1086 0.0801 Note 46

Year	1	2	3	4	5	6	7	8	9	10	Total
Year N	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	44.2
Year N	2.2 NON	2.2 NON	2.2 NON	2.2 NON	2.2 NON	2.2 NON	2.2 NON	2.2 NON	2.2 NON	2.2 NON	52.7
Year N	1.022	1.000	1.113	1.113	1.113	1.113	1.113	1.113	1.113	1.113	7.0
Year N	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	52.7	48.8
Year N	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	100.0
Year N	0.8 NON	0.8 NON	0.8 NON	0.8 NON	0.8 NON	0.8 NON	0.8 NON	0.8 NON	0.8 NON	0.8 NON	44.2
Year N	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	7.0
Year N	0.2 NON	0.2 NON	0.2 NON	0.2 NON	0.2 NON	0.2 NON	0.2 NON	0.2 NON	0.2 NON	0.2 NON	7.0
Year N	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	48.8
Year N	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	48.8
Year N	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	100.0
Year N	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	100.0
Year N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.2
Year N	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	44.2
Year N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0
Year N	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	7.0
Year N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.8
Year N	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	48.8
Year N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
Year N	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	100.0
Year N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.2
Year N	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	44.2
Year N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0
Year N	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	7.0
Year N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.8
Year N	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	48.8
Year N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
Year N	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	100.0
Year N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.2
Year N	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	44.2
Year N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0
Year N	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	7.0
Year N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.8
Year N	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	48.8
Year N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
Year N	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	100.0
Year N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	44.2
Year N	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	44.2
Year N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.0
Year N	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	7.0
Year N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.8
Year N	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	48.8
Year N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
Year N	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	0.0 NON	100.0

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 0.77 0.16 0.04 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.27

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: 0.77

Total IPCC and non IPCC N2O 4.80  
 Total anthropogenic 4.80  
 Total including natural 5.78

Kind of source  
 Current crops 0.00  
 Total anthropogenic 0.00  
 Total including natural 0.98

Note 43  
 Note 43  
 Note 44  
 Note 44  
 Note 44  
 Note 45  
 Note 45  
 Note 46  
 Note 47  
 Note 48  
 Note 49  
 Note 49  
 Note 47  
 Note 48  
 Note 49  
 Note 47  
 Note 48  
 Note 49  
 Note 47  
 Note 48  
 Note 49  
 Note 47  
 Note 48  
 Note 49  
 Note 50  
 Note 51  
 Note 51  
 Note 51  
 Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE TO PRODUCE  
 AND CONTINUING WITH LIQUID PIG MANURE TO PRODUCE

Year Fertilizer/manure # Store Amounts Field 1/0 Or-ganic 1/0 Nnorm propor-tion, % Crop # Name Use Fodder: Uses #21-61 Food #72 N crop Food/#71 bev #8 Fuel/other #9 Manure Final handling N a-# Name 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									
	0.0195	0.0159																				
TOTAL	0.0295	0.0236	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	22	1	1	97.8	32	71.3	29.8	0.0	0.0	14.5	31	41.5	1.79	2.53	1.65	2.02
1	Vol/NH3 N	NO	0.0	0.0	2.2	NON	100.00	WRS	1.113	YES	12.0	Pig	0.84	0.84	0.0	0.0	0.0	0.0	5.8	1.30	1.68	1.19	1.36
	N leach	1.022	1.000	1.000	1.113	ORG	1.00	1.113	0.271	14.5	12.0	Pork	3	3	0.0	0.0	3.0	Liquid	0.0	0.08	0.0125	0.08	0.1000
Year 2	Vol/NH3 Pig	NO	0.0	0.0	35.7	0	100	11	0	1	26.8	32	17.2	7.2	0.0	0.0	3.0	31	10.0	0.38	0.65	0.35	0.50
	N leach	1.000	1.000	1.000	1.000	ORG	1.00	1.000	1.000	YES	6.6	Pig	0.67	0.67	0.0	0.0	2.9	Liquid	1.4	0.10	0.0125	0.10	0.0100
Year 3	Vol/NH3 Pig	NO	0.0	0.0	8.6	0	100	11	0	1	6.5	32	4.1	1.7	0.0	0.0	0.7	31	2.4	0.09	0.16	0.08	0.12
	N leach	1.000	1.000	1.000	1.000	ORG	1.00	1.000	1.000	YES	1.6	Pig	0.67	0.67	0.0	0.0	0.7	Liquid	0.3	0.02	0.0125	0.02	0.0100
Year 4	Vol/NH3 Pig	NO	0.0	0.0	2.1	0	100	1	0	1	1.6	32	0.9	0.4	0.0	0.0	0.2	31	0.5	0.04	0.04	0.02	0.03
	N leach	1.000	1.000	1.000	1.000	ORG	1.00	1.000	1.000	YES	0.4	Pig	0.65	0.65	0.0	0.0	0.1	Liquid	0.1	0.01	0.0125	0.01	0.0100
Year 5	Vol/NH3 Pig	NO	0.0	0.0	0.5	0	100	10	0	1	0.3	32	0.2	0.1	0.0	0.0	0.0	31	0.1	0.00	0.01	0.00	0.01
	N leach	1.000	1.000	1.000	1.000	ORG	1.00	1.000	1.000	YES	0.1	Pig	0.66	0.66	0.0	0.0	0.0	Liquid	0.0	0.00	0.0125	0.00	0.0100
Year 6	Vol/NH3 Pig	NO	0.0	0.0	0.1	0	100	22	1.000	YES	0.1	Pork	0.404	0.0	0.0	0.0	0.0	31	0.0	0.00	0.00	0.00	0.00
	N leach	1.000	1.000	1.000	1.000	ORG	1.00	1.000	1.000	YES	0.1	Pork	0.404	0.0	0.0	0.0	0.0	Liquid	0.0	0.00	0.00	0.00	0.00
Year 7	Vol/NH3 Pig	NO	0.0	0.0	0.0	0	100	11	1.113	YES	0.0	32	0.0	0.0	0.0	0.0	0.0	31	0.0	0.00	0.00	0.00	0.00
	N leach	1.000	1.000	1.000	1.000	ORG	1.00	1.113	0.287	0.0	0.0	Pork	3	3	0.0	0.0	0.0	Liquid	0.0	0.00	0.00	0.00	0.00
Year 8	Vol/NH3 Pig	NO	0.0	0.0	0.0	0	100	11	1.000	YES	0.0	32	0.0	0.0	0.0	0.0	0.0	31	0.0	0.00	0.00	0.00	0.00
	N leach	1.000	1.000	1.000	1.000	ORG	1.00	1.000	1.000	YES	0.0	Pig	0.67	0.67	0.0	0.0	0.0	Liquid	0.0	0.00	0.00	0.00	0.00
Year 9	Vol/NH3 Pig	NO	0.0	0.0	0.0	0	100	1	1.000	YES	0.0	32	0.0	0.0	0.0	0.0	0.0	31	0.0	0.00	0.00	0.00	0.00
	N leach	1.000	1.000	1.000	1.000	ORG	1.00	1.000	1.000	YES	0.0	Pig	0.65	0.65	0.0	0.0	0.0	Liquid	0.0	0.00	0.00	0.00	0.00
Year 10	Vol/NH3 Pig	NO	0.0	0.0	0.0	0	100	10	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	31	0.0	0.00	0.00	0.00	0.00
	N leach	1.000	1.000	1.000	1.000	ORG	1.00	1.000	1.000	YES	0.0	Pig	0.66	0.66	0.0	0.0	0.0	Liquid	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	0.77	0.22	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	1.07	1.38

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: 0.00

Total IPCC and non IPCC N2O 2.53  
 Total anthropogenic 2.53  
 Total including natural 3.60



N CHAIN STARTING WITH N FERTILIZER TO PRODUCE TO PRODUCE  
 AND CONTINUING WITH PIG DEEP LITTER TO PRODUCE WINTER RAPESEED FOR OIL AND WINTER WHEAT FOR PIG PORK PIG PORK

Year	Fertilizer/manure #	Store Name	Amounts 1/0	Field	Or-ganic 1/0	Nnorm propor-tion, %	Crop # Name	Straw used 1/0	Crop use & leach	Use # Name	Food Fed	N crop #71-61	Food #72	Fuel/ other #9	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	100.0	WRS	1.113 YES	1	97.8	32	71.3	29.8	0.0	14.5	33	41.5	2.50	3.34	1.59	2.02	Note 45
Year N NH3	NO	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.26	0.26	0.26	Note 45	
1-10 N leach	1.022	1.000	1.000	1.000	ORG	1.00	1.113	0.271	14.5	12.0 Pig	3	0.84	0.0	3.0 Deep	10.4	10.4	0.13	0.13	0.13	0.13	Note 47	
Year 2	33	0	35.1	35.1	8.8 NON	100.0	WWH	1.000 YES	0	26.3	32	14.7	6.1	2.9	33	8.5	0.30	0.30	0.09	0.09	Note 49	
N leach	NO	0.0	0.0	0.0	ORG	1.00	1.000	0.443	2.9	8.7 Pig	3	0.67	0.0	0.0 Pig	2.1	2.1	0.11	0.11	0.11	0.11	Note 48	
Year 3	33	0	7.2	7.2	1.8 NON	100.0	WWH	1.000 YES	0	5.4	32	3.0	1.3	0.6	33	1.8	0.07	0.07	0.07	0.07	Note 49	
N leach	NO	0.0	0.0	0.0	ORG	1.00	1.000	0.443	0.6	1.8 Pig	3	0.67	0.0	0.0 Pig	0.4	0.4	0.02	0.02	0.02	0.02	Note 48	
Year 4	33	0	1.5	1.5	0.4 NON	100.0	SBA	1.000 YES	0	1.1	32	0.6	0.2	0.1	33	0.3	0.01	0.01	0.01	0.01	Note 49	
N leach	NO	0.0	0.0	0.0	ORG	1.00	1.000	0.483	0.1	0.4 Pig	3	0.65	0.0	0.1 Deep	0.1	0.1	0.00	0.00	0.00	0.00	Note 48	
Year 5	33	0	0.3	0.3	0.1 NON	100.0	WBA	1.000 YES	0	0.2	32	0.1	0.0	0.0	33	0.1	0.00	0.00	0.00	0.00	Note 47	
N leach	NO	0.0	0.0	0.0	ORG	1.00	1.000	0.483	0.0	0.1 Pig	3	0.66	0.0	0.0 Deep	0.0	0.0	0.00	0.00	0.00	0.00	Note 48	
Year 6	33	0	0.1	0.1	0.0 NON	100.0	WRS	1.113 YES	1	0.0	32	0.0	0.0	0.0	33	0.0	0.00	0.00	0.00	0.00	Note 47	
N leach	NO	0.0	0.0	0.0	ORG	1.00	1.113	0.382	0.0	0.0 Pig	3	0.84	0.0	0.0 Deep	0.0	0.0	0.00	0.00	0.00	0.00	Note 48	
Year 7	33	0	0.0	0.0	0.0 NON	100.0	WWH	1.000 YES	0	0.0	32	0.0	0.0	0.0	33	0.0	0.00	0.00	0.00	0.00	Note 47	
N leach	NO	0.0	0.0	0.0	ORG	1.00	1.000	0.443	0.0	0.0 Pig	3	0.67	0.0	0.0 Deep	0.0	0.0	0.00	0.00	0.00	0.00	Note 48	
Year 8	33	0	0.0	0.0	0.0 NON	100.0	WWH	1.000 YES	0	0.0	32	0.0	0.0	0.0	33	0.0	0.00	0.00	0.00	0.00	Note 47	
N leach	NO	0.0	0.0	0.0	ORG	1.00	1.000	0.443	0.0	0.0 Pig	3	0.67	0.0	0.0 Deep	0.0	0.0	0.00	0.00	0.00	0.00	Note 48	
Year 9	33	0	0.0	0.0	0.0 NON	100.0	SBA	1.000 YES	0	0.0	32	0.0	0.0	0.0	33	0.0	0.00	0.00	0.00	0.00	Note 47	
N leach	NO	0.0	0.0	0.0	ORG	1.00	1.000	0.483	0.0	0.0 Pig	3	0.65	0.0	0.0 Deep	0.0	0.0	0.00	0.00	0.00	0.00	Note 48	
Year 10	33	0	0.0	0.0	0.0 NON	100.0	WBA	1.000 YES	0	0.0	32	0.0	0.0	0.0	33	0.0	0.00	0.00	0.00	0.00	Note 47	
N leach	NO	0.0	0.0	0.0	ORG	1.00	1.000	0.483	0.0	0.0 Pig	3	0.66	0.0	0.0 Deep	0.0	0.0	0.00	0.00	0.00	0.00	Note 48	

N2O-N in food/beverage/fuel/other

Year	N	Vol/NH3	N	NO	1.000	WRS	1.113	YES	1	97.8	32	71.3	29.8	0.0	14.5	33	41.5	2.50	3.34	1.59	2.02	Note 45
Year 1	1	NO	0.0	0.0	2.2 NON	100.0	WRS	1.113 YES	1	12.0 Pig	3	0.84	0.0	3.0 Deep	10.4	10.4	0.13	0.13	0.13	0.13	Note 47	
Year 2	33	NO	0.0	0.0	8.8 NON	100.0	WWH	1.000 YES	0	26.3	32	14.7	6.1	2.9	33	8.5	0.30	0.30	0.09	0.09	Note 49	
Year 3	33	NO	0.0	0.0	1.8 NON	100.0	WWH	1.000 YES	0	5.4	32	3.0	1.3	0.6	33	1.8	0.07	0.07	0.07	0.07	Note 49	
Year 4	33	NO	0.0	0.0	0.4 NON	100.0	SBA	1.000 YES	0	1.1	32	0.6	0.2	0.1	33	0.3	0.01	0.01	0.01	0.01	Note 49	
Year 5	33	NO	0.0	0.0	0.1 NON	100.0	WBA	1.000 YES	0	0.2	32	0.1	0.0	0.0	33	0.1	0.00	0.00	0.00	0.00	Note 47	
Year 6	33	NO	0.0	0.0	0.0 NON	100.0	WRS	1.113 YES	1	0.0	32	0.0	0.0	0.0	33	0.0	0.00	0.00	0.00	0.00	Note 48	
Year 7	33	NO	0.0	0.0	0.0 NON	100.0	WWH	1.000 YES	0	0.0	32	0.0	0.0	0.0	33	0.0	0.00	0.00	0.00	0.00	Note 47	
Year 8	33	NO	0.0	0.0	0.0 NON	100.0	WWH	1.000 YES	0	0.0	32	0.0	0.0	0.0	33	0.0	0.00	0.00	0.00	0.00	Note 48	
Year 9	33	NO	0.0	0.0	0.0 NON	100.0	SBA	1.000 YES	0	0.0	32	0.0	0.0	0.0	33	0.0	0.00	0.00	0.00	0.00	Note 47	
Year 10	33	NO	0.0	0.0	0.0 NON	100.0	WBA	1.000 YES	0	0.0	32	0.0	0.0	0.0	33	0.0	0.00	0.00	0.00	0.00	Note 48	

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 0.77 0.19 0.04 0.01 0.00 0.00 0.00 0.00 0.00 0.00 1.01 1.31

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: 0.00

Total IPCC and non IPCC N2O 3.34  
 Total anthropogenic 3.34  
 Total including natural 4.35  
 Note 51 2.02  
 Note 51 2.02  
 Note 51 3.03

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE TO PRODUCE  
 AND CONTINUING WITH MANURE FROM ROOTING PIGS TO PRODUCE TO PRODUCE

Year Fertilizer/manure Store Amounts Field 1/0 Store 1/0 Or-ganic 1/0 Nnorm propor 1/0 Crop # Name Use Fodder: Uses #21-61 Food #72 N crop Food/ #71/ bevs other Fuel/ Crop use & leach Straw used 1/0 Cereal benefit 1/0 TO PRODUCE TO PRODUCE WINTER RAPESEED FOR OIL AND WINTER WHEAT FOR PIG PORK PIG PORK

Total N	RATIO OF N2O-N TO N IN FIRST CROP		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 NH3	N leach	IPCC 1996	IPCC 2006	IPCC 1996	IPCC 2006	IPCC 1996	IPCC 2006	IPCC 1996	IPCC 2006
1-10	N leach	1.022	1.000	0.0281	0.0228	0.0281	0.0228	0.0464	0.0351	0.0464
TOTAL										

N2O-N in food/beverage/fuel/other

Year	N	Vol/NH3	N	NO	100.0	0	100	22	1	1	97.8	32	71.3	29.8	0.0	0.0	14.5	34	41.5	59.5	3.06	3.98	2.69	3.01	Note
1	N leach	1.022	1.000	0.0	2.2	NON	100.00	WRS	1.113	YES	12.0	Pig	0.84	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.06	0.06	0.06	Note 45	
Year	N	34	0	41.5	41.5	0	100	11	0	1	38.6	32	17.3	7.2	0.0	0.0	4.3	34	10.1	34.5	0.86	1.19	0.26	Note 45	
2	N leach	0.699	1.000	0.0	2.9	NON	100.00	WWH	1.000	YES	17.0	Pig	0.67	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.06	0.06	0.06	Note 45	
Year	N	34	0	10.1	10.1	0	100	11	0	1	9.4	32	4.2	1.8	0.0	0.0	1.0	34	2.5	59.5	3.06	3.98	2.69	Note 45	
3	N leach	0.699	1.000	0.0	0.7	NON	100.00	WWH	1.000	YES	4.1	Pig	0.67	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.06	0.06	0.06	Note 45	
Year	N	34	0	2.5	2.5	0	100	1	0	1	2.3	32	1.0	0.4	0.0	0.0	0.3	34	0.6	34.5	0.86	1.19	0.26	Note 45	
4	N leach	0.699	1.000	0.0	0.2	NON	100.00	SBA	1.000	YES	1.1	Pig	0.65	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.06	0.06	0.06	Note 45	
Year	N	34	0	0.6	0.6	0	100	10	0	1	0.5	32	0.2	0.1	0.0	0.0	0.1	34	0.1	100.0	0.06	0.06	0.06	Note 45	
5	N leach	0.699	1.000	0.0	0.0	NON	100.00	WBA	1.000	YES	0.2	Pig	0.66	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.06	0.06	0.06	Note 45	
Year	N	34	0	0.1	0.1	0	100	22	1	1	0.1	32	0.1	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.06	0.06	0.06	Note 45	
6	N leach	0.699	1.000	0.0	0.0	NON	100.00	WRS	1.113	YES	0.0	Pig	0.84	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.06	0.06	0.06	Note 45	
Year	N	34	0	0.0	0.0	0	100	11	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.06	0.06	0.06	Note 45	
7	N leach	0.699	1.000	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Pig	0.67	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.06	0.06	0.06	Note 45	
Year	N	34	0	0.0	0.0	0	100	11	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.06	0.06	0.06	Note 45	
8	N leach	0.699	1.000	0.0	0.0	NON	100.00	WWH	1.000	YES	0.0	Pig	0.67	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.06	0.06	0.06	Note 45	
Year	N	34	0	0.0	0.0	0	100	10	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.06	0.06	0.06	Note 45	
9	N leach	0.699	1.000	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	Pig	0.65	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.06	0.06	0.06	Note 45	
Year	N	34	0	0.0	0.0	0	100	10	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.06	0.06	0.06	Note 45	
10	N leach	0.699	1.000	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Pig	0.66	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.06	0.06	0.06	Note 45	
Year	N	34	0	0.0	0.0	0	100	10	0	1	0.0	32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	0.06	0.06	0.06	Note 45	

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 0.77 0.18 0.04 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.31

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 3.98  
 Total anthropogenic 3.98  
 Total including natural 5.00  
 Note 51 3.01 Note 51 3.01 Note 51 4.02 Note 51



N CHAIN STARTING WITH N FERTILIZER TO PRODUCE TO PRODUCE  
 AND CONTINUING WITH SEPARATED POULTRY MANURE TO PRODUCE

Year	Fertilizer/manure #	Store Name	Amounts 1/0	Field 1/0	Or-ganic 1/0	Nnorm propor 1/0	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use # Name	Fodder: Uses #21-61 Fed	N crop #71/ #72	Food #72	Fuel/ other #9	Manure handling # Name	Final N a-	N2O-N emission IPCC 1996	N2O-N emission IPCC 2006	Total	Each	Total	
Total N																							
Year 1-10																							
RATIO OF N2O-N TO N IN FIRST CROP TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED ACCORDING TO IPCC 1996 IPCC 2006 FIRST YEAR 0.0227 0.0157 TOTAL 0.0303 0.0208 TOTAL N AMOUNTS IN KG AND % LEACHED TOTAL N AMOUNTS IN KG AND %																							

N2O-N in food/beverage/fuel/other

Year	Vol/NH3 N	leach	1	0	100.0	2.2 NON	100.00 WRS	1.113 YES	1	1	97.8	42	71.3	36.4	0.0	14.5	42	34.9	1.53	1.94	1.15	1.43	
1																							
Year 2																							
Year 3																							
Year 4																							
Year 5																							
Year 6																							
Year 7																							
Year 8																							
Year 9																							
Year 10																							
Year																							
Area with crop, ha																							

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 2.60  
 Total anthropogenic 2.60  
 Total including natural 3.54

Kind of source  
 Current crops 0.00  
 Total anthropogenic 0.00  
 Total including natural 0.94

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE Cereal Straw Crop Crop Fuel/ Fuel/ N2O-N emission  
 AND CONTINUING WITH POULTRY DEEP LITTER TO PRODUCE benefit used & use # #71/ bevc other IPCC 1996  
 POULTRY MEAT  
 POULTRY MEAT

Year Fertilizer/manure Or- Nnorm Crop Crop Crop Food/ Fuel/ Manure Final N2O-N emission  
 # Store Amounts Store # Name # use & use #71/ bevc other # Name handling N a-  
 Name 1/0 Store Field 1/0 ganic 1/0 Name 1/0 leach leach Name Fed Uses #21-61 Food #8 #9 # Name mounts Each Total Each Total  
 1/0 1/0 1/0 1/0 1/0 1/0 1/0 1/0 1/0 1/0 1/0 1/0 1/0 1/0 1/0 1/0 1/0 1/0 1/0 1/0 1/0 1/0 1/0

Total N		TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED											56.2		56.0	
Year N NH3		TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3											23.3		23.2	
1-10 N leach		TOTAL N AMOUNTS IN KG AND % LEACHED											20.8		20.7	
TOTAL		TOTAL N AMOUNTS IN KG AND %											100.3		100.0	
RATIO OF N2O-N TO N IN FIRST CROP		TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED											56.2		56.0	
ACCORDING TO		TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3											23.3		23.2	
FIRST YEAR		TOTAL N AMOUNTS IN KG AND % LEACHED											20.8		20.7	
TOTAL		TOTAL N AMOUNTS IN KG AND %											100.3		100.0	

N2O-N in food/beverage/fuel/other

Year 1	Voi/NH3	N	1	0	100.0	100.0	0	100	22	1	1	97.8	42	71.3	36.4	0.0	0.0	14.5	43	34.9	1.68	2.14	1.12
	N leach	NO	2.2	NON	100.0	WRS		1.113	YES	12.0	Poultry		0.84		0.0	0.0	0.0	0.0	14.5	0.0	0.16	0.0125	
	N leach	ORG	1.022	1.000	1.000	1.113		0.271	14.5	12.0	Meat		4	4	3.0	0.0	0.0	3.0	0.0	0.30	0.0200		
Year 2	Voi/NH3	Poultry NO	21.2	0	21.2	100.0	WWH	1.000	YES	15.9	42	8.0	42	6.1	3.1	0.0	0.0	1.8	43	3.0	0.26	0.52	
	N leach	Deep	0.600	1.013	1.013	1.000	1.000	0.614	1.8	8.0	Meat		4	4	1.7	0.0	0.0	1.7	0.0	0.07	0.0125		
Year 3	Voi/NH3	Poultry NO	1.8	0	1.8	100.0	WBA	1.000	YES	1.4	42	0.0	42	0.5	0.3	0.0	0.0	0.2	43	0.3	0.02	0.04	
	N leach	Deep	0.600	1.013	1.013	1.000	1.000	0.614	0.2	0.7	Meat		4	4	0.1	0.0	0.0	0.1	0.0	0.01	0.0125		
Year 4	Voi/NH3	Poultry NO	0.2	0	0.2	100.0	SBA	1.000	YES	0.1	42	0.0	42	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	
	N leach	Deep	0.600	1.013	1.013	1.000	1.000	0.642	0.0	0.1	Meat		4	4	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	
Year 5	Voi/NH3	Poultry NO	0.0	0	0.0	100.0	WBA	1.000	YES	0.0	42	0.0	42	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	
	N leach	Deep	0.600	1.013	1.013	1.000	1.000	0.642	0.0	0.0	Meat		4	4	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	
Year 6	Voi/NH3	Poultry NO	0.0	0	0.0	100.0	WRS	1.113	YES	0.0	42	0.0	42	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	
	N leach	Deep	0.600	1.013	1.013	1.000	1.000	0.572	0.0	0.0	Meat		4	4	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	
Year 7	Voi/NH3	Poultry NO	0.0	0	0.0	100.0	WWH	1.000	YES	0.0	42	0.0	42	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	
	N leach	Deep	0.600	1.013	1.013	1.000	1.000	0.614	0.0	0.0	Meat		4	4	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	
Year 8	Voi/NH3	Poultry NO	0.0	0	0.0	100.0	WWH	1.000	YES	0.0	42	0.0	42	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	
	N leach	Deep	0.600	1.013	1.013	1.000	1.000	0.614	0.0	0.0	Meat		4	4	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	
Year 9	Voi/NH3	Poultry NO	0.0	0	0.0	100.0	SBA	1.000	YES	0.0	42	0.0	42	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	
	N leach	Deep	0.600	1.013	1.013	1.000	1.000	0.642	0.0	0.0	Meat		4	4	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	
Year 10	Voi/NH3	Poultry NO	0.0	0	0.0	100.0	WBA	1.000	YES	0.0	42	0.0	42	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	
	N leach	Deep	0.600	1.013	1.013	1.000	1.000	0.642	0.0	0.0	Meat		4	4	0.0	0.0	0.0	0.0	43	0.0	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 0.77 0.08 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.86 1.11 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: 2.71  
 Total anthropogenic: 2.71  
 Total including natural: 3.57  
 Note 51  
 Note 51  
 Note 51  
 Note 51



N CHAIN STARTING WITH N FERTILIZER TO PRODUCE TO PRODUCE WINTER RAPESEED FOR OIL AND FUEL/ OTHER #9 POULTRY MEAT  
 AND CONTINUING WITH MANURE FROM SCRAPING POULTRY TO PRODUCE WINTER WHEAT FOR POULTRY MEAT

Year	Fertilizer/manure #	Store 1/0	Amounts Store 1/0	Field	Or-ganic 1/0	Nnorm propor 1/0	Crop # Name	Cereal benefit 1/0	Straw used 1/0	Scrap leach	Use # Name	Food Fed	N crop #71-61	Food #72	Fuel/ bever #8	Manure handling # Name	Final N-a-	N2O-N emission IPCC 1996	Total	N2O-N emission IPCC 2006	Total
RATIO OF N2O-N TO N IN FIRST CROP TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED ACCORDING TO IPCC 1996 IPCC 2006 FIRST YEAR 0.0266 0.0213 TOTAL 0.0408 0.0299																					

Year	N	Vol/NH3	N	NO	100.0	1	0	100.0	2.2 NON	1.113 YES	1	1	97.8	42	71.3	36.4	0.0	0.0	14.5	44	34.9	2.60	3.50	2.26	2.56	Note	
1	Vol/NH3	N	NO	100.0	1	1	0	100.0	2.2 NON	1.113 YES	1	1	97.8	42	71.3	36.4	0.0	0.0	14.5	44	34.9	2.60	3.50	2.26	2.56	Note 45	
	N leach			1.022	1.000	ORG	1.00	1.113	ORG	0.271	14.5		12.0 Poultry		0.84				0.0	Poultry	0.0	0.05	0.05	0.05	0.05	Note 45	
Year	N	44	0	34.9	0	100	11	1.000	YES	0	1	32.5	42	10.1	5.2	0.0	0.0	3.6	44	5.0	0.0	0.85	0.85	0.25	0.25	Note 45	
2	Vol/NH3	Poultry NO	NO	0.0	2.4 NON	100.00	WWH	1.000	YES	1.000	YES	18.8 Poultry		0.67					0.0	Poultry	0.0	0.02	0.02	0.14	0.200	Note 48	
	N leach	Scrap	0.484	1.000	ORG	1.00	1.000	0.689	3.6	0	1	4.6	42	1.4	0.7	0.0	0.0	3.5	Scrap	0.0	0.47	0.08	0.15	0.07	0.09	Note 47	
Year	N	44	0	5.0	0.3 NON	100.00	WWH	1.000	YES	1.000	YES	2.7 Poultry		0.67					0.0	Poultry	0.0	0.00	0.00	0.02	0.02	Note 48	
3	Vol/NH3	Poultry NO	NO	0.0	0.7	0	100	1	ORG	0.689	0.5	2.7	Meat		4				0.5	Scrap	0.0	0.07	0.02	0.02	0.02	Note 49	
	N leach	Scrap	0.484	1.000	0.7	0	100	1	ORG	1.000	YES	0.4	Poultry		0.65				0.0	Poultry	0.0	0.01	0.01	0.00	0.00	Note 48	
Year	N	44	0	0.1	0.0 NON	100.00	SBA	1.000	YES	0.711	0.1	0.4	Meat		4				0.1	Scrap	0.0	0.01	0.02	0.00	0.00	Note 49	
4	Vol/NH3	Poultry NO	NO	0.0	0.1	0	100	10	ORG	0	1	0.1	Meat		0.0				0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47	
	N leach	Scrap	0.484	1.000	0.0 NON	100.00	WBA	1.000	YES	1.000	YES	0.1	Poultry		0.66				0.0	Poultry	0.0	0.00	0.00	0.00	0.00	0.00	Note 48
Year	N	44	0	0.0	0.0 NON	100.00	WBA	1.000	YES	0.712	0.0	0.1	Meat		4				0.0	Scrap	0.0	0.00	0.00	0.00	0.00	Note 49	
5	Vol/NH3	Poultry NO	NO	0.0	0.0	0	100	22	ORG	1.113	0.0	0.0	Meat		0.84				0.0	Poultry	0.0	0.00	0.00	0.00	0.00	Note 47	
	N leach	Scrap	0.484	1.000	0.0 NON	100.00	WRS	1.000	YES	0.655	0.0	0.0	Meat		4				0.0	Scrap	0.0	0.00	0.00	0.00	0.00	Note 48	
Year	N	44	0	0.0	0.0 NON	100.00	WRS	1.000	YES	1.113	0.0	0.0	Meat		4				0.0	Scrap	0.0	0.00	0.00	0.00	0.00	Note 49	
6	Vol/NH3	Poultry NO	NO	0.0	0.0	0	100	11	ORG	1.000	YES	0.0	Meat		0.67				0.0	Poultry	0.0	0.00	0.00	0.00	0.00	Note 47	
	N leach	Scrap	0.484	1.000	0.0 NON	100.00	WWH	1.000	YES	0.689	0.0	0.0	Meat		4				0.0	Scrap	0.0	0.00	0.00	0.00	0.00	Note 48	
Year	N	44	0	0.0	0.0 NON	100.00	WWH	1.000	YES	0.689	0.0	0.0	Meat		4				0.0	Scrap	0.0	0.00	0.00	0.00	0.00	Note 49	
7	Vol/NH3	Poultry NO	NO	0.0	0.0	0	100	1	ORG	1.000	YES	0.0	Meat		0.67				0.0	Poultry	0.0	0.00	0.00	0.00	0.00	Note 47	
	N leach	Scrap	0.484	1.000	0.0 NON	100.00	WRS	1.000	YES	0.689	0.0	0.0	Meat		4				0.0	Scrap	0.0	0.00	0.00	0.00	0.00	Note 48	
Year	N	44	0	0.0	0.0 NON	100.00	WRS	1.000	YES	0.689	0.0	0.0	Meat		4				0.0	Scrap	0.0	0.00	0.00	0.00	0.00	Note 49	
8	Vol/NH3	Poultry NO	NO	0.0	0.0	0	100	1	ORG	1.000	YES	0.0	Meat		0.67				0.0	Poultry	0.0	0.00	0.00	0.00	0.00	Note 47	
	N leach	Scrap	0.484	1.000	0.0 NON	100.00	WRS	1.000	YES	0.689	0.0	0.0	Meat		4				0.0	Scrap	0.0	0.00	0.00	0.00	0.00	Note 48	
Year	N	44	0	0.0	0.0 NON	100.00	WRS	1.000	YES	0.689	0.0	0.0	Meat		4				0.0	Scrap	0.0	0.00	0.00	0.00	0.00	Note 49	
9	Vol/NH3	Poultry NO	NO	0.0	0.0	0	100	1	ORG	1.000	YES	0.0	Meat		0.65				0.0	Poultry	0.0	0.00	0.00	0.00	0.00	Note 47	
	N leach	Scrap	0.484	1.000	0.0 NON	100.00	SBA	1.000	YES	0.711	0.0	0.0	Meat		4				0.0	Scrap	0.0	0.00	0.00	0.00	0.00	Note 48	
Year	N	44	0	0.0	0.0 NON	100.00	SBA	1.000	YES	0.711	0.0	0.0	Meat		4				0.0	Scrap	0.0	0.00	0.00	0.00	0.00	Note 49	
10	Vol/NH3	Poultry NO	NO	0.0	0.0	0	100	10	ORG	1.000	YES	0.0	Meat		0.66				0.0	Poultry	0.0	0.00	0.00	0.00	0.00	Note 47	
	N leach	Scrap	0.484	1.000	0.0 NON	100.00	WBA	1.000	YES	0.712	0.0	0.0	Meat		4				0.0	Scrap	0.0	0.00	0.00	0.00	0.00	Note 48	
Year	N	44	0	0.0	0.0 NON	100.00	WBA	1.000	YES	0.712	0.0	0.0	Meat		4				0.0	Scrap	0.0	0.00	0.00	0.00	0.00	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	Note
Area with crop, ha	0.77	0.11	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.90	1.16	Note 50
Possible additional non IPCC N2O-N emissions	Value												Total IPCC and non IPCC N2O
N residues emissions, ratio of N2O-N to N:	0.0000												3.50
Increased soil N emissions, kg N2O-N/ha:	0.00												3.50
Natural background emissions, kg N2O-N/ha:	1.00												4.39

C2 N CHAIN CALCULATIONS SHEET C: N CHAINS BASED UPON DANISH VALUES CALCULATIONS By Jacob Bugge C2

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE CEREAL TO PRODUCE WINTER RAPESEED FOR OIL AND POULTRY EGGS  
 AND CONTINUING WITH LIQUID POULTRY MANURE TO PRODUCE WINTER WHEAT FOR POULTRY EGGS

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

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

Year	N	VoI/NH3	N	NO	100.0	0	100	22	1	1	97.8	43	71.3	17.2	0.0	0.0	14.5	41	54.1	1.31	1.69	1.26
Year 1	N	VoI/NH3	N	NO	100.0	0	100	22	1	1	97.8	43	71.3	17.2	0.0	0.0	14.5	41	54.1	1.31	1.69	1.26
	N	leach	1.022	1.000	2.2	NON	100.00	WRS	1.113	YES	12.0	Poultry	0.84						5.4	0.08	0.125	0.08
	Year	N	41	0	48.7	ORG	1.00	1.113	0.271	14.5	12.0	Eggs	4						0.0	0.30	0.0010	0.09
	2	VoI/NH3	Poultry	NO	0.0	12.2	NON	100.00	WWH	1.000	YES	12.1	Poultry	0.67					15.4	0.52	0.96	0.48
	Year	N	leach	Liquid	0.867	1.000	ORG	1.00	1.000	0.443	4.0	12.1	Eggs	4					0.0	0.30	0.0010	0.09
	3	VoI/NH3	Poultry	NO	0.0	13.9	NON	100.00	WBA	1.000	YES	3.5	Poultry	0.67					4.4	0.15	0.27	0.14
	Year	N	leach	Liquid	0.867	1.000	ORG	1.00	1.000	0.443	1.2	3.5	Eggs	4					0.0	0.04	0.125	0.04
	4	VoI/NH3	Poultry	NO	0.0	4.0	NON	100.00	SBA	1.000	YES	1.1	Poultry	0.65					0.0	0.09	0.0010	0.03
	Year	N	leach	Liquid	0.867	1.000	ORG	1.00	1.000	0.483	0.3	1.1	Eggs	4					0.0	0.03	0.0010	0.01
	5	VoI/NH3	Poultry	NO	0.0	1.1	NON	100.00	WBA	1.000	YES	0.8	4.0	0.1	0.0	0.0	0.0	0.1	0.3	0.01	0.02	0.01
	Year	N	leach	Liquid	0.867	1.000	ORG	1.00	1.000	0.483	0.1	0.3	Poultry	0.66					0.0	0.00	0.125	0.00
	6	VoI/NH3	Poultry	NO	0.0	0.3	NON	100.00	WRS	1.000	YES	0.2	4.0	0.1	0.0	0.0	0.0	0.0	0.0	0.01	0.00	0.00
	Year	N	leach	Liquid	0.867	1.000	ORG	1.00	1.113	0.382	0.0	0.0	Poultry	0.84					0.0	0.00	0.125	0.00
	7	VoI/NH3	Poultry	NO	0.0	0.1	NON	100.00	WBA	1.000	YES	0.1	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	Year	N	leach	Liquid	0.867	1.000	ORG	1.00	1.000	0.443	0.0	0.0	Eggs	4					0.0	0.00	0.125	0.00
	8	VoI/NH3	Poultry	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	Poultry	0.67					0.0	0.00	0.125	0.00
	Year	N	leach	Liquid	0.867	1.000	ORG	1.00	1.000	0.443	0.0	0.0	Eggs	4					0.0	0.00	0.125	0.00
	9	VoI/NH3	Poultry	NO	0.0	0.0	NON	100.00	SBA	1.000	YES	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	Year	N	leach	Liquid	0.867	1.000	ORG	1.00	1.000	0.483	0.0	0.0	Eggs	4					0.0	0.00	0.125	0.00
	10	VoI/NH3	Poultry	NO	0.0	0.0	NON	100.00	WBA	1.000	YES	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00
	Year	N	leach	Liquid	0.867	1.000	ORG	1.00	1.000	0.483	0.0	0.0	Eggs	4					0.0	0.00	0.125	0.00

TOTAL N AMOUNTS IN KG AND %

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		0.77	0.26	0.07	0.03	0.01	0.00	0.00	0.00	0.00	1.15	1.49
Possible additional non IPCC N2O-N emissions		0.0000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Increased soil N emissions, kg N2O-N/ha:		1.00	0.77	0.26	0.07	0.03	0.01	0.00	0.00	0.00	1.15	1.49
Natural background emissions, kg N2O-N/ha:												

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE TO PRODUCE  
AND CONTINUING WITH SEPARATED POULTRY MANURE TO PRODUCE TO PRODUCE

Table with columns: Year, Fertilizer/manure, Store, Amounts, Field, Or-ganic, Nnorm, Crop, Straw, Crop, Use, Feeder, Food, Fuel, Manure, Final, N2O-N emission, IPCC 2006. Includes a summary table for 'RATIO OF N2O-N TO N IN FIRST CROP'.

N2O-N in food/beverage/fuel/other

Main data table with columns: Year, N, Vol/INH3, N, NO, 100.0, 0, 100.0, 22, 1, 1, 97.8, 43, 71.3, 17.2, 0.0, 0.0, 14.5, 42, 54.1, 2.37, 3.34, 1.73, 2.26, Note 45. Rows 1-10.

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 0.77 0.22 0.05 0.02 0.00 0.00 0.00 0.00 0.00 0.00 1.06 1.38

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:



N CHAIN STARTING WITH N FERTILIZER TO PRODUCE CEREAL TO PRODUCE WINTER RAPESEED FOR OIL AND POULTRY EGGS  
AND CONTINUING WITH MANURE FROM SCRAPING POULTRY TO PRODUCE WINTER WHEAT FOR POULTRY EGGS

Note 43  
Note 43

Year Fertilizer/manure Store Amounts Field 1/0 Store 1/0 Or-ganic 1/0 Nnorm propor # Crop use & leach Straw used 1/0 Cereal benefit 1/0 Use # Name Fed Fodder: Uses #21-61 Food #72 N crop #71/ bevs other #9 Fuel/ #8 Food/ #7 Total N2O-N emission IPCC 1996 Final N handling # Name mounts Each Total IPCC 2006 N2O-N emission IPCC 2006 Total

Note 44  
Note 44  
Note 44  
Note 44

Table with 2 columns: Year (Total N, Year N NH3, 1-10 N leach) and various N amounts in kg and % ending as food/fuel/other/removed. Includes sub-totals for total N amounts in kg and % leached and total N amounts in kg and %.

N2O-N in food/beverage/fuel/other

Main data table with columns for Year (1-10), N leach, and various N amounts in kg and % ending as food/fuel/other/removed. Includes sub-totals for total N amounts in kg and % leached and total N amounts in kg and %.

Year Area with crop, ha Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8 Year 9 Year 10 Total Total/year 1

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: 0.77

Total IPCC and non IPCC N2O Total IPCC and non IPCC N2O 4.84  
Kind of source  
0.00 Current crops  
0.00 Total anthropogenic  
0.98 Total including natural

Note 51  
Note 51  
Note 51  
Note 51



N CHAIN STARTING WITH N FERTILIZER TO PRODUCE CEREAL TO PRODUCE WINTER RAPESEED FOR OIL AND SHEEP MILK/MUTTON

AND CONTINUING WITH MANURE FROM GRAZING SHEEP TO PRODUCE WINTER WHEAT FOR SHEEP MILK/MUTTON

Table with columns: Year, Fertilizer/manure #, Store, Amounts, Field, 1/0, Or-ganic, Nnorm, Crop, Straw, Crop, Use, Fodder, N crop, Food/bev, Fuel/other, Manure, Final, N2O-N emission, IPCC 2006, Each, Total. Includes sub-tables for 'RATIO OF N2O-N TO N IN FIRST CROP' and 'TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED'.

N2O-N in food/beverage/fuel/other

Main data table with columns: Year, N, VoI/NH3, N, NO, 100.0, 0, 100.0, 22, 1, 1, 97.8, 51, 71.3, 10.1, 0.0, 0.0, 14.5, 54, 61.2, 2.48, 2.81, 1.02, 1.87, 2.37, Note 45. Rows 1-10.

Year

Area with crop, ha

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: 1.02

Total IPCC and non IPCC N2O 5.40, Total anthropogenic 5.40, Total including natural 6.42, Note 50, Note 51, 2.37 Note 51, 2.37 Note 51, 3.39 Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE Cereal Straw Crop Fuel/ Manure Final N2O-N emission  
 AND CONTINUING WITH GOAT DEEP LITTER TO PRODUCE benefit used & leach use # Uses #21-61 #71/ bev #8 #9 other # N2O-N emission  
 GOAT MILK/MEAT GOAT MILK/MEAT

Year Fertilizer/manure Or- Nnorm Crop Crop Fuel/ Manure Final N2O-N emission  
 # Store Amounts ganic propor # #71/ bev #8 #9 other # N2O-N emission  
 Name 1/0 Store Field 1/0 Name 1/0 Name 1/0 Name Fed Food 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					TOTAL N AMOUNTS IN KG AND %									
1-10 N leach	0.0324					0.0175																								
TOTAL	0.0595					0.0328																								

N2O-N in food/beverage/fuel/other

Year N	1	0	100.0	100.0	1	1	1	97.8	61	71.3	6.8	0.0	0.0	14.5	63	64.4	2.36	2.77	1.29	5.10	2.11	2.81	Note 45
1	Vol/NH3	N	NO	0.0	2.2	NON	100.0	WRS	1.113	YES	0.84	0.0	Goat	12.0	Goat	9.7	0.12	0.0125	0.12	0.37	0.37	2.81	Note 45
	N leach			1.000	ORG	1.00	1.113		0.271	14.5	6	0.0	3.0	Deep	0.0	0.0050	0.09	0.0200	0.09	1.11	0.33	Note 45	
Year N	2	0	63.7	63.7	0	100	11	47.7	61	18.4	1.8	0.0	0.0	5.3	63	16.6	0.94	1.73	0.61	5.10	2.11	Note 44	
2	Vol/NH3	Goat	NO	0.0	15.9	NON	100.0	WWH	1.000	YES	0.67	0.0	0.0	0.0	Goat	2.5	0.18	0.0125	0.18	0.37	0.37	Note 44	
	N leach	Deep		1.162	ORG	1.00	1.000		0.614	5.3	6	0.0	5.2	Deep	0.0	0.0050	0.18	0.0200	0.18	1.11	0.33	Note 44	
Year N	3	0	16.4	16.4	0	100	11	12.3	61	4.8	0.5	0.0	0.0	1.4	63	4.3	0.24	0.45	0.16	5.10	2.11	Note 44	
3	Vol/NH3	Goat	NO	0.0	4.1	NON	100.0	WWH	1.000	YES	0.67	0.0	0.0	0.0	Goat	0.6	0.05	0.0125	0.05	1.11	0.37	Note 44	
	N leach	Deep		1.162	ORG	1.00	1.000		0.614	1.4	6	0.0	1.3	Deep	0.0	0.0050	0.16	0.0200	0.16	1.11	0.33	Note 44	
Year N	4	0	4.2	4.2	0	100	1	3.2	61	1.1	0.1	0.0	0.0	0.4	63	1.0	0.06	0.11	0.04	5.10	2.11	Note 44	
4	Vol/NH3	Goat	NO	0.0	1.1	NON	100.0	SBA	1.000	YES	0.65	0.0	0.0	0.0	Goat	0.2	0.01	0.0125	0.01	1.11	0.37	Note 44	
	N leach	Deep		1.162	ORG	1.00	1.000		0.642	0.4	6	0.0	0.3	Deep	0.0	0.0050	0.04	0.0200	0.04	1.11	0.37	Note 44	
Year N	5	0	1.0	1.0	0	100	10	0.8	61	0.3	0.0	0.0	0.0	0.1	63	0.2	0.01	0.03	0.01	5.10	2.11	Note 44	
5	Vol/NH3	Goat	NO	0.0	0.3	NON	100.0	WBA	1.000	YES	0.66	0.0	0.0	0.0	Goat	0.0	0.00	0.0125	0.00	0.03	0.37	Note 44	
	N leach	Deep		1.162	ORG	1.00	1.000		0.642	0.1	6	0.0	0.1	Deep	0.0	0.0050	0.01	0.0200	0.01	0.03	0.37	Note 44	
Year N	6	0	0.2	0.2	0	100	22	0.2	61	0.1	0.0	0.0	0.0	0.0	63	0.1	0.00	0.01	0.00	5.10	2.11	Note 44	
6	Vol/NH3	Goat	NO	0.0	0.1	NON	100.0	WRS	1.113	YES	0.84	0.0	0.0	0.0	Goat	0.0	0.00	0.0125	0.00	0.01	0.37	Note 44	
	N leach	Deep		1.162	ORG	1.00	1.113		0.572	0.0	6	0.0	0.0	0.0	Deep	0.0	0.0050	0.00	0.0200	0.01	0.37	Note 44	
Year N	7	0	0.1	0.1	0	100	11	0.1	61	0.0	0.0	0.0	0.0	0.0	63	0.0	0.00	0.00	0.00	5.10	2.11	Note 44	
7	Vol/NH3	Goat	NO	0.0	0.0	NON	100.0	WWH	1.000	YES	0.67	0.0	0.0	0.0	Goat	0.0	0.00	0.0125	0.00	0.00	0.37	Note 44	
	N leach	Deep		1.162	ORG	1.00	1.000		0.614	0.0	6	0.0	0.0	0.0	Deep	0.0	0.0050	0.00	0.0200	0.00	0.37	Note 44	
Year N	8	0	0.0	0.0	0.0	100	11	0.0	61	0.0	0.0	0.0	0.0	0.0	63	0.0	0.00	0.00	0.00	5.10	2.11	Note 44	
8	Vol/NH3	Goat	NO	0.0	0.0	NON	100.0	WWH	1.000	YES	0.67	0.0	0.0	0.0	Goat	0.0	0.00	0.0125	0.00	0.00	0.37	Note 44	
	N leach	Deep		1.162	ORG	1.00	1.000		0.614	0.0	6	0.0	0.0	0.0	Deep	0.0	0.0050	0.00	0.0200	0.00	0.37	Note 44	
Year N	9	0	0.0	0.0	0.0	100	1	0.0	61	0.0	0.0	0.0	0.0	0.0	63	0.0	0.00	0.00	0.00	5.10	2.11	Note 44	
9	Vol/NH3	Goat	NO	0.0	0.0	NON	100.0	SBA	1.000	YES	0.65	0.0	0.0	0.0	Goat	0.0	0.00	0.0125	0.00	0.00	0.37	Note 44	
	N leach	Deep		1.162	ORG	1.00	1.000		0.642	0.0	6	0.0	0.0	0.0	Deep	0.0	0.0050	0.00	0.0200	0.00	0.37	Note 44	
Year N	10	0	0.0	0.0	0.0	100	10	0.0	61	0.0	0.0	0.0	0.0	0.0	63	0.0	0.00	0.00	0.00	5.10	2.11	Note 44	
10	Vol/NH3	Goat	NO	0.0	0.0	NON	100.0	WBA	1.000	YES	0.66	0.0	0.0	0.0	Goat	0.0	0.00	0.0125	0.00	0.00	0.37	Note 44	
	N leach	Deep		1.162	ORG	1.00	1.000		0.642	0.0	6	0.0	0.0	0.0	Deep	0.0	0.0050	0.00	0.0200	0.00	0.37	Note 44	

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 0.77 0.24 0.06 0.02 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1.10 1.42

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: 0.77

Total IPCC and non IPCC N2O  
 5.10  
 5.10  
 6.20

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

Note 51  
 2.81 Note 51  
 2.81 Note 51  
 3.91 Note 51







N CHAIN STARTING WITH NO MANURE TO PRODUCE CLOVER GRASS WITHOUT MANURE FOR LOW N CROP  
 AND CONTINUING WITH GREEN MANURE LOW N TO PRODUCE WINTER WHEAT FOR 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 leach	Use #	Fodder: Uses #21-61 Fed	N crop #71/	Food #72	Fuel/other #9	Manure handling #	Final N a-	N2O-N emission IPCC 1996	N2O-N emission IPCC 2006	Total	
Total N	0	0	0.0	0.0	0	100	2610	1	1	270.2	72	0.0	0.0	4089.5	0.0	72	4089.5	14.71	14.71	139	68
Year 1-10 N leach	None	NO	0.0	0.0	0.0	100	CGRO	1.296	YES	-3819.3	N crop	0.8	1095.3	Green	0.0	0.0	0.0	0.00	0.0125	14.71	15
Year 1-10 N leach	72	0	4089.5	4089.5	0	100	11	0	1	3067.1	21	1051.3	247.5	0.0	0.0	338.9	21	803.8	38.52	96.01	15
Year 2	Green	NO	0.0	1022.4	NON	100.00	WWH	1.000	YES	1676.9	Cattle	0.67	0.0	0.0	0.0	0.0	0.0	64.3	10.87	10.87	15
Year 3	Low	0	751.3	751.3	0	100	11	0.657	338.9	1676.9	Dairy	2	79.6	0.0	0.0	62.3	21	258.4	12.58	14.21	15
Year 4	Cattle	NO	0.0	187.8	NON	100.00	WWH	1.000	YES	163.2	Cattle	0.67	0.0	0.0	0.0	0.0	0.0	20.7	2.09	0.0125	15
Year 5	Liquid	0.933	1.016	241.6	0	100	1	0.400	62.3	181.2	Dairy	2	23.0	0.0	0.0	20.9	21	77.9	2.37	4.69	15
Year 6	Cattle	NO	0.0	60.4	NON	100.00	SBA	1.000	YES	59.3	Cattle	0.65	0.0	0.0	0.0	0.0	0.0	6.2	0.67	0.0125	15
Year 7	Liquid	0.933	1.016	72.8	0	100	10	0.443	20.9	59.3	Dairy	2	7.0	0.0	0.0	6.3	21	23.3	0.71	1.41	15
Year 8	Cattle	NO	0.0	18.2	NON	100.00	WBA	1.000	YES	17.9	Cattle	0.66	0.0	0.0	0.0	0.0	0.0	1.9	0.20	0.0125	15
Year 9	Liquid	0.933	1.016	21.8	0	100	2610	0.444	6.3	16.3	Dairy	2	0.0	0.0	0.0	4.2	Liquid	0.0	0.45	0.0010	15
Year 10	Cattle	NO	0.0	5.4	NON	100.00	ERROR	1.296	YES	-214.6	N crop	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0125	15
Year 11	Liquid	0.933	1.016	231.0	0	100	11	-13.128	0.0	0.0	low N	72	14.0	0.0	0.0	66.3	Green	0.0	0.00	0.0000	15
Year 12	Green	NO	0.0	57.7	NON	100.00	WWH	1.000	YES	94.7	Cattle	0.67	0.0	0.0	0.0	19.1	21	45.4	2.44	5.42	15
Year 13	Low	0	533	1.000	0.0	100	1000	0.657	19.1	94.7	Dairy	2	4.5	0.0	0.0	18.7	Liquid	0.0	2.37	0.0010	15
Year 14	Cattle	NO	0.0	42.4	0	100	11	0	1	31.8	21	19.1	0.0	0.0	0.0	3.5	21	14.6	0.45	0.80	15
Year 15	Liquid	0.933	1.016	10.6	NON	100.00	WWH	1.000	YES	9.2	Cattle	0.67	0.0	0.0	0.0	0.0	0.0	1.2	0.12	0.0125	15
Year 16	Cattle	NO	0.0	13.6	0	100	1	0.400	3.5	9.2	Dairy	2	1.3	0.0	0.0	3.4	Liquid	0.0	0.23	0.0010	15
Year 17	Liquid	0.933	1.016	3.4	NON	100.00	SBA	0	1	10.2	21	5.7	0.0	0.0	0.0	1.2	21	4.4	0.14	0.26	15
Year 18	Cattle	NO	0.0	4.1	0	100	10	1.000	YES	3.4	Cattle	0.65	0.0	0.0	0.0	0.0	0.0	0.4	0.04	0.0125	15
Year 19	Liquid	0.933	1.016	4.1	0	100	10	0.443	1.2	3.4	Dairy	2	0.4	0.0	0.0	0.9	Liquid	0.0	0.08	0.0010	15
Year 20	Cattle	NO	0.0	1.0	NON	100.00	WBA	1.000	YES	3.1	21	1.7	0.0	0.0	0.0	0.4	21	1.3	0.04	0.08	15
Year 21	Liquid	0.933	1.016	0.0	0.0	100	1000	0.444	0.4	1.0	Cattle	0.66	0.0	0.0	0.0	0.0	0.0	0.1	0.01	0.0125	15
Year 22	Liquid	0.933	1.016	0.0	0.0	100	1000	0.444	0.4	1.0	Dairy	2	0.2	0.0	0.0	0.2	Liquid	0.0	0.03	0.0010	15

N2O-N in food/beverage/fuel/other 0.1672

Year	Area with crop, ha	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	17.07	13.57	4.36	1.87	0.45	15.94	0.77	0.25	0.11	0.03	54.42	3.19	0.1672

Possible additional non N residues emissions, ratio of N2O-N to N:	Value	Total IPCC and non IPCC N2O
Increased soil N emissions, kg N2O-N/ha:	0.0000	139
Natural background emissions, kg N2O-N/ha:	1.00	193
Total	1.00	332



N CHAIN STARTING WITH N FERTILIZER AND CONTINUING WITH NO MANURE TO PRODUCE TO PRODUCE WINTER WHEAT FOR NOTHING FOR FUEL FUEL

Table with columns: Year, Fertilizer/manure #, Store, Amounts, Field, Or-ganic, Nnorm, Crop, Straw used, Crop use & leach, Use #, Fodder, Food, N crop #71, Food #72, Fuel/other #9, Food #8, Manure handling #, Final N amounts, N2O-N emission IPCC 1996, N2O-N emission IPCC 2006, Total, Each, Total. Includes summary rows for N1-10 and N20-N/N in food/beverage/fuel/other.

Main data table with columns: Year, Vol/NH3, N, N leach, Fertilizer/manure #, Store, Amounts, Field, Or-ganic, Nnorm, Crop, Straw used, Crop use & leach, Use #, Fodder, Food, N crop #71, Food #72, Fuel/other #9, Food #8, Manure handling #, Final N amounts, N2O-N emission IPCC 1996, N2O-N emission IPCC 2006, Total, Each, Total. Rows 1-10.

Summary and additional data table with columns: Year, Area with crop, ha, Possible additional non IPCC N2O-N emissions, N residues emissions, ratio of N2O-N to N, Increased soil N emissions, kg N2O-N/ha, Natural background emissions, kg N2O-N/ha, Total/year 10, Total/year 1, Kind of source, Total IPCC and non IPCC N2O, Total anthropogenic, Total including natural. Includes rows for area with crop and various emission totals.

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

Year Fertilizer/manure # Store Amounts Field 1/0 Or-ganic 1/0 Nnorm propor # Crop use & leach Straw used 1/0 Cereal benefit 1/0 N crop #71/ bevs #72 Food #77 Fuel/other #9 Manure handling # Name Final N a- mounts Total N2O-N emission IPCC 2006  
 Name 1/0 Store Amounts Field 1/0 Or-ganic 1/0 Nnorm propor # Crop use & leach Straw used 1/0 Cereal benefit 1/0 N crop #71/ bevs #72 Food #77 Fuel/other #9 Manure handling # Name Final N a- mounts Total N2O-N emission IPCC 1996 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										48239	46.8
Year N NH3	IPCC 1996										IPCC 2006										339	32.9
1-10 N leach	0.0162										0.0186										20989	20.3
TOTAL	2.1604										2.0293										103155	100.0

N2O-N in food/beverage/fuel/other 0.0523

Year	N	1	0	100.0	100.0	0	100	261	0	1	97.8	21	1168.3	329.7	0.0	0.0	0.0	21	838.7	18.18	18.87	21.02	1874	2524	1660	2524	1874	2371	Note 45
1	Vol/NH3	N	NO	0.0	2.2	NON	100.00	CGR	1.000	YES	-1070.5	Cattle	0.8					1169.8	Cattle	67.1	0.69	0.0125	0.69	0.0100	Note 48				
	N leach	1.022	1.000		-10.946	0.0	0.0	Dairy	0.0	Dairy	0.0	0.0	0.0	0.0	0.0	0.0	0.0	125.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49				
Year	2	Vol/NH3	Cattle	NO	0.0	783.9	0	100	261	1	587.9	21	22441.1	6332.0	0.0	0.0	0.0	21	16109.1	119.47	134.32	177.28	192.13	Note 47					
	N leach	0.933	1.016		196.0	NON	100.00	CGR	3.500	YES	-21853.1	Cattle	0.8					7032.5	Cattle	1288.7	14.85	0.0125	14.85	0.0100	Note 48				
Year	3	Vol/NH3	Cattle	NO	0.0	15057.5	0	100	11	11293.1	21	6774.1	1594.8	0.0	0.0	0.0	0.0	21	5179.3	161.20	284.76	152.02	218.34	Note 47					
	N leach	0.933	1.016		3764.4	NON	100.00	WWH	1.000	YES	3271.0	Cattle	0.67					0.0	Cattle	414.3	41.79	0.0125	41.79	0.0100	Note 48				
Year	4	Vol/NH3	Cattle	NO	0.0	4841.2	0	100	11	3630.9	21	2178.0	512.8	0.0	0.0	0.0	0.0	21	1665.2	51.83	91.55	48.88	70.20	Note 47					
	N leach	0.933	1.016		1210.3	NON	100.00	WWH	1.000	YES	1051.7	Cattle	0.67					392.7	Liquid	133.2	13.44	0.0125	13.44	0.0100	Note 48				
Year	5	Vol/NH3	Cattle	NO	0.0	1556.5	0	100	11	1167.4	21	700.3	164.9	0.0	0.0	0.0	0.0	21	535.4	16.66	29.44	15.72	22.57	Note 47					
	N leach	0.933	1.016		389.1	NON	100.00	WWH	1.000	YES	338.1	Cattle	0.67					0.0	Cattle	42.8	4.32	0.0125	4.32	0.0100	Note 48				
Year	6	Vol/NH3	Cattle	NO	0.0	500.5	0	100	261	0.400	129.0	338.1	Dairy	2	375.3	21	4092.8	1154.8	0.0	0.0	0.0	0.0	79.38	82.98	Note 47				
	N leach	0.933	1.016		125.1	NON	100.00	CGR	1.000	YES	-3717.5	Cattle	0.8					4489.5	Cattle	235.0	3.60	0.0125	3.60	0.0100	Note 48				
Year	7	Vol/NH3	Cattle	NO	0.0	2746.2	0	100	261	1	2059.6	21	78614.4	22182.0	0.0	0.0	0.0	0.0	21	56432.5	418.51	470.53	621.04	673.05	Note 47				
	N leach	0.933	1.016		686.5	NON	100.00	CGR	3.500	YES	-76554.8	Cattle	0.8					24635.8	Cattle	4514.6	52.01	0.0125	52.01	0.0100	Note 48				
Year	8	Vol/NH3	Cattle	NO	0.0	52748.6	0	100	11	39561.4	21	23730.9	5586.9	0.0	0.0	0.0	0.0	0.0	4371.6	21	18144.0	564.70	997.56	532.56	764.89	Note 47			
	N leach	0.933	1.016		13187.1	NON	100.00	WWH	1.000	YES	11459.0	Cattle	0.67					2632.3	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49				
Year	9	Vol/NH3	Cattle	NO	0.0	16959.5	0	100	11	12719.6	21	7629.9	1796.3	0.0	0.0	0.0	0.0	0.0	1405.5	21	5833.6	181.56	320.73	171.23	245.92	Note 47			
	N leach	0.933	1.016		4239.9	NON	100.00	WWH	1.000	YES	3684.3	Cattle	0.67					4278.8	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49				
Year	10	Vol/NH3	Cattle	NO	0.0	5452.8	0	100	11	4089.6	21	2453.1	577.5	0.0	0.0	0.0	0.0	0.0	451.9	21	1875.6	58.37	103.12	55.05	79.07	Note 47			
	N leach	0.933	1.016		1363.2	NON	100.00	WWH	1.000	YES	1184.5	Cattle	0.67					442.3	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 4.88 122.18 87.44 28.11 9.04 22.28 428.02 306.33 98.49 31.67 1138.45 233.38 Note 50

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: 1.00  
 Total IPCC and non IPCC N2O 2524  
 Total anthropogenic 2524  
 Total including natural 3662  
 Note 51  
 2371 Note 51  
 2371 Note 51  
 3509 Note 51

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

Year Fertilizer/manure Or- Nnorm Crop Straw Crop Fuel/ Manure Final N2O-N emission  
 # Store Amounts ganic propor # use & use #21-61 N-crop Food/ Fuel/ handling N-a- IPCC 2006  
 Name 1/0 Store Field 1/0 1/0 1/0 leach leach Name Fed Uses #71/#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		14684 63.1	
Year N/NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		5318 22.9	
1-10 N leach	0.0162	0.0186	TOTAL N AMOUNTS IN KG AND % LEACHED		3271 14.1	
TOTAL	0.3672	0.3460	TOTAL N AMOUNTS IN KG AND %		23273 100.0	

N2O-N/N in food/beverage/fuel/other 0.0292 0.0275 Note 46

Year	Vol/NH3	N	100.0	0	100	261	0	1	97.8	21	1168.3	329.7	0.0	0.0	0.0	838.7	21.02	18.18	18.87	21.02
1	Vol/NH3	N	2.2	NON	100.0	CGR	1.000	YES	-1070.5	Cattle	0.8						0.69	0.69	0.0125	0.69
	N leach	1.022	1.000	ORG	1.00	1.000	-10.946	0.0	0.0	Dairy	2				1169.8	67.1	0.00	0.00	0.0010	0.00
Year	Vol/NH3	Cattle	783.9	0	100	261	1	1	587.9	21	22441.1	6332.0	0.0	0.0	0.0	16109.1	177.28	119.47	134.32	177.28
2	Vol/NH3	Cattle	196.0	NON	100.0	CGR	3.500	YES	-21853.1	Cattle	0.8						14.85	14.85	0.0125	14.85
	N leach	Liquid	1.016	ORG	1.00	3.500	-37.169	0.0	0.0	Dairy	2				7032.5	1288.7	0.00	0.00	0.0010	0.00
Year	Vol/NH3	Cattle	15057.5	0	100	11	0	1	11293.1	8	0.0	0.0	0.0	6774.1	1247.9	0.0	128.20	156.43	275.85	128.20
3	Vol/NH3	Cattle	3764.4	NON	100.0	WWH	1.000	YES	3271.0	Food/	0.67				0.0		37.64	37.64	0.0125	37.64
	N leach	Liquid	1.016	ORG	1.00	1.000	0.400	1247.9	3271.0	beverage	8						0.00	81.78	0.0000	24.53
Year	Vol/NH3	None	0.0	0.0	100	11	0.0	1	0.0	8	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0000	0.00
4	Vol/NH3	None	0.0	NON	100.0	NO	1.000	YES	0.0	Food/	0.67						0.00	0.00	0.0125	0.00
	N leach	1.000	1.000	ORG	1.00	1.000	0.357	0.0	0.0	beverage	8						0.00	0.00	0.0000	0.00
Year	Vol/NH3	None	0.0	0.0	100	11	0.0	1	0.0	8	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0000	0.00
5	Vol/NH3	None	0.0	NON	100.0	NO	1.000	YES	0.0	Food/	0.67						0.00	0.00	0.0125	0.00
	N leach	1.000	1.000	ORG	1.00	1.000	0.357	0.0	0.0	beverage	8						0.00	0.00	0.0000	0.00
Year	Vol/NH3	None	0.0	0.0	100	261	0.0	1	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0125	0.00
6	Vol/NH3	None	0.0	NON	100.0	NO	1.000	YES	0.0	Cattle	0.8						0.00	0.00	0.0125	0.00
	N leach	1.000	1.000	ORG	1.00	1.000	-10.683	0.0	0.0	Dairy	2						0.00	0.00	0.0010	0.00
Year	Vol/NH3	Cattle	0.0	0.0	100	261	1	1	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0125	0.00
7	Vol/NH3	Cattle	0.0	NON	100.0	CGR	3.500	YES	0.0	Cattle	0.8						0.00	0.00	0.0125	0.00
	N leach	Liquid	0.933	ORG	1.00	3.500	-37.169	0.0	0.0	Dairy	2						0.00	0.00	0.0010	0.00
Year	Vol/NH3	Cattle	0.0	0.0	100	11	0.0	1	0.0	8	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0125	0.00
8	Vol/NH3	Cattle	0.0	NON	100.0	WWH	1.000	YES	0.0	Food/	0.67						0.00	0.00	0.0125	0.00
	N leach	Liquid	0.933	ORG	1.00	1.000	0.400	0.0	0.0	beverage	8						0.00	0.00	0.0000	0.00
Year	Vol/NH3	None	0.0	0.0	100	11	0.0	1	0.0	8	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0125	0.00
9	Vol/NH3	None	0.0	NON	100.0	NO	1.000	YES	0.0	Food/	0.67						0.00	0.00	0.0000	0.00
	N leach	1.000	1.000	ORG	1.00	1.000	0.357	0.0	0.0	beverage	8						0.00	0.00	0.0000	0.00
Year	Vol/NH3	None	0.0	0.0	100	11	0.0	1	0.0	8	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0125	0.00
10	Vol/NH3	None	0.0	NON	100.0	NO	1.000	YES	0.0	Food/	0.67						0.00	0.00	0.0125	0.00
	N leach	1.000	1.000	ORG	1.00	1.000	0.357	0.0	0.0	beverage	8						0.00	0.00	0.0000	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 4.88 122.18 87.44 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 214.50 43.97  
 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: 0.00  
 Natural background emissions, kg N2O-N/ha: 1.00

Total IPCC and non IPCC N2O 429 644  
 Kind of source 404 Note 51  
 Current crops 429  
 Total anthropogenic 429  
 Total including natural 644  
 Note 51  
 404 Note 51  
 404 Note 51  
 619 Note 51

SUMMARY CATTLE DAIRY

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER LIQUID CATTLE MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR OIL 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	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	48.55 48.02	1.94
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	25.37 25.10	0.25
1-10 N leach	0.0195	0.0163	TOTAL N AMOUNTS IN KG AND % LEACHED	27.17 26.88	0.20
TOTAL	0.0347	0.0280	TOTAL N AMOUNTS IN KG AND %	101.09 100.00	
N2O-N/N in food/beverage/fuel/other				0.0613	0.0494 Note 46
Area with crop, ha			Total/year 1		
Natural background emissions, kg N2O-N/ha:			1.18 1.53		Note 50
			1.18	4.16	3.58 Note 51
N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER SEPARATED CATTLE MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR OIL 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	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	48.19 47.67	1.95
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	23.31 23.06	0.23
1-10 N leach	0.0246	0.0162	TOTAL N AMOUNTS IN KG AND % LEACHED	29.60 29.28	0.22
TOTAL	0.0429	0.0281	TOTAL N AMOUNTS IN KG AND %	101.10 100.00	
N2O-N/N in food/beverage/fuel/other				0.0764	0.0500 Note 46
Area with crop, ha			Total/year 1		
Natural background emissions, kg N2O-N/ha:			1.16 1.50		Note 50
			1.16	4.84	3.57 Note 51
N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER CATTLE DEEP LITTER	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR OIL 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	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	46.40 42.22	1.94
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	24.18 22.00	0.24
1-10 N leach	0.0298	0.0163	TOTAL N AMOUNTS IN KG AND % LEACHED	39.31 35.77	0.29
TOTAL	0.0522	0.0289	TOTAL N AMOUNTS IN KG AND %	109.88 100.00	
N2O-N/N in food/beverage/fuel/other				0.0965	0.0533 Note 46
Area with crop, ha			Total/year 1		
Natural background emissions, kg N2O-N/ha:			1.05 1.35		Note 50
			1.05	5.52	3.52 Note 51
N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER MANURE FROM GRAZING CATTLE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR OIL 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	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	46.54 46.54	2.98
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	6.71 6.71	0.07
1-10 N leach	0.0302	0.0249	TOTAL N AMOUNTS IN KG AND % LEACHED	46.75 46.75	0.35
TOTAL	0.0538	0.0397	TOTAL N AMOUNTS IN KG AND %	100.00 100.00	
N2O-N/N in food/beverage/fuel/other				0.0992	0.0731 Note 46
Area with crop, ha			Total/year 1		
Natural background emissions, kg N2O-N/ha:			0.97 1.25		Note 50
			0.97	5.58	4.37 Note 51



SUMMARY CATTLE BEEF

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER LIQUID CATTLE MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR OIL 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		46.02	2.00
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	26.93	0.27
1-10 N leach	0.0195	0.0165	TOTAL N AMOUNTS IN KG AND % LEACHED	28.20	0.21
TOTAL	0.0358	0.0290	TOTAL N AMOUNTS IN KG AND %	101.16	100.00

N2O-N/N in food/beverage/fuel/other 0.0667 0.0540 Note 46

Area with crop, ha  
 Natural background emissions, kg N2O-N/ha:  
 Total/year 1  
 1.21 1.57  
 1.21

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER SEPARATED CATTLE MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR OIL 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		45.69	2.02
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	24.71	0.25
1-10 N leach	0.0249	0.0164	TOTAL N AMOUNTS IN KG AND % LEACHED	30.77	0.23
TOTAL	0.0445	0.0291	TOTAL N AMOUNTS IN KG AND %	101.17	100.00

N2O-N/N in food/beverage/fuel/other 0.0836 0.0546 Note 46

Area with crop, ha  
 Natural background emissions, kg N2O-N/ha:  
 Total/year 1  
 1.18 1.53  
 1.05

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER CATTLE DEEP LITTER	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR OIL 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		43.97	2.00
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	25.53	0.26
1-10 N leach	0.0304	0.0164	TOTAL N AMOUNTS IN KG AND % LEACHED	40.99	0.31
TOTAL	0.0543	0.0298	TOTAL N AMOUNTS IN KG AND %	110.49	100.00

N2O-N/N in food/beverage/fuel/other 0.1058 0.0582 Note 46

Area with crop, ha  
 Natural background emissions, kg N2O-N/ha:  
 Total/year 1  
 1.06 1.38  
 1.06

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER MANURE FROM GRAZING CATTLE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR OIL 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		44.17	3.10
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	6.98	0.07
1-10 N leach	0.0307	0.0254	TOTAL N AMOUNTS IN KG AND % LEACHED	48.85	0.37
TOTAL	0.0559	0.0413	TOTAL N AMOUNTS IN KG AND %	100.00	100.00

N2O-N/N in food/beverage/fuel/other 0.1086 0.0801 Note 46

Area with crop, ha  
 Natural background emissions, kg N2O-N/ha:  
 Total/year 1  
 0.98 1.27  
 0.98

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER LIQUID CATTLE MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR OIL 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		44.17	3.10
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	6.98	0.07
1-10 N leach	0.0307	0.0254	TOTAL N AMOUNTS IN KG AND % LEACHED	48.85	0.37
TOTAL	0.0559	0.0413	TOTAL N AMOUNTS IN KG AND %	100.00	100.00

N2O-N/N in food/beverage/fuel/other 0.1086 0.0801 Note 46

Area with crop, ha  
 Natural background emissions, kg N2O-N/ha:  
 Total/year 1  
 0.98 1.27  
 0.98

SUMMARY PIG PORK

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER LIQUID PIG MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR OIL 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		57.62	1.65
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	21.59	0.22
1-10 N leach	0.0195	0.0159	TOTAL N AMOUNTS IN KG AND % LEACHED	20.79	0.16
TOTAL	0.0295	0.0236	TOTAL N AMOUNTS IN KG AND %	100.00	100.00
N2O-N/N in food/beverage/fuel/other					0.0439
Area with crop, ha		Total/year 1			0.0351
Natural background emissions, kg N2O-N/ha:		1.07			Note 50
		1.07			Note 51
N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER SEPARATED PIG MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR OIL 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		55.53	1.60
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	22.51	0.23
1-10 N leach	0.0235	0.0160	TOTAL N AMOUNTS IN KG AND % LEACHED	22.98	0.17
TOTAL	0.0345	0.0233	TOTAL N AMOUNTS IN KG AND %	101.03	100.00
N2O-N/N in food/beverage/fuel/other					0.0533
Area with crop, ha		Total/year 1			0.0360
Natural background emissions, kg N2O-N/ha:		1.01			Note 50
		1.01			Note 51
N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER PIG DEEP LITTER	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR OIL 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		55.63	1.59
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	26.27	0.26
1-10 N leach	0.0269	0.0162	TOTAL N AMOUNTS IN KG AND % LEACHED	23.07	0.17
TOTAL	0.0389	0.0236	TOTAL N AMOUNTS IN KG AND %	104.97	100.00
N2O-N/N in food/beverage/fuel/other					0.0600
Area with crop, ha		Total/year 1			0.0363
Natural background emissions, kg N2O-N/ha:		1.01			Note 50
		1.01			Note 51
N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER MANURE FROM ROOTING PIGS	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR OIL 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		59.45	2.69
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	6.03	0.06
1-10 N leach	0.0281	0.0228	TOTAL N AMOUNTS IN KG AND % LEACHED	34.52	0.26
TOTAL	0.0464	0.0351	TOTAL N AMOUNTS IN KG AND %	100.00	100.00
N2O-N/N in food/beverage/fuel/other					0.0670
Area with crop, ha		Total/year 1			0.0506
Natural background emissions, kg N2O-N/ha:		1.01			Note 50
		1.01			Note 51



SUMMARY POULTRY EGGS

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER LIQUID POULTRY MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR OIL AND WINTER WHEAT FOR	POULTRY EGGS POULTRY EGGS	Note
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		44.14	1.93
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	26.76	0.27
1-10 N leach	0.0196	0.0166	TOTAL N AMOUNTS IN KG AND % LEACHED	29.10	0.22
TOTAL	0.0353	0.0282	TOTAL N AMOUNTS IN KG AND %	100.00	100.00

N2O-N/N in food/beverage/fuel/other		0.0686		0.0548	Note 46
Area with crop, ha		Total/year 1			
Natural background emissions, kg N2O-N/ha:		1.15		1.49	Note 50
		1.15		4.17	3.57 Note 51

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER SEPARATED POULTRY MANURE	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR OIL AND WINTER WHEAT FOR	POULTRY EGGS POULTRY EGGS	Note
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		41.42	1.73
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	33.22	0.33
1-10 N leach	0.0250	0.0171	TOTAL N AMOUNTS IN KG AND % LEACHED	25.36	0.19
TOTAL	0.0389	0.0263	TOTAL N AMOUNTS IN KG AND %	100.00	100.00

N2O-N/N in food/beverage/fuel/other		0.0806		0.0545	Note 46
Area with crop, ha		Total/year 1			
Natural background emissions, kg N2O-N/ha:		1.06		1.38	Note 50
		1.06		4.40	3.32 Note 51

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER POULTRY DEEP LITTER	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR OIL AND WINTER WHEAT FOR	POULTRY EGGS POULTRY EGGS	Note
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		37.45	1.53
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	36.66	0.37
1-10 N leach	0.0285	0.0176	TOTAL N AMOUNTS IN KG AND % LEACHED	26.38	0.20
TOTAL	0.0400	0.0244	TOTAL N AMOUNTS IN KG AND %	100.49	100.00

N2O-N/N in food/beverage/fuel/other		0.0916		0.0558	Note 46
Area with crop, ha		Total/year 1			
Natural background emissions, kg N2O-N/ha:		0.91		1.18	Note 50
		0.91		4.34	3.00 Note 51

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER MANURE FROM SCRAPING POULTRY	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR OIL AND WINTER WHEAT FOR	POULTRY EGGS POULTRY EGGS	Note
Total N	RATIO OF N2O-N TO N IN FIRST CROP	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED		43.61	3.13
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	7.05	0.07
1-10 N leach	0.0311	0.0258	TOTAL N AMOUNTS IN KG AND % LEACHED	49.34	0.37
TOTAL	0.0564	0.0416	TOTAL N AMOUNTS IN KG AND %	100.00	100.00

N2O-N/N in food/beverage/fuel/other		0.1110		0.0819	Note 46
Area with crop, ha		Total/year 1			
Natural background emissions, kg N2O-N/ha:		0.98		1.27	Note 50
		0.98		5.82	4.55 Note 51

SUMMARY SHEEP AND GOATS

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER SHEEP DEEP LITTER	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR OIL 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		39.43 35.05 4.04	2.41
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	15.79 14.04 0.16	0.16
1-10 N leach	0.0316	0.0172	TOTAL N AMOUNTS IN KG AND % LEACHED	57.26 50.91 1.43	0.43
TOTAL	0.0656	0.0350	TOTAL N AMOUNTS IN KG AND %	112.47 100.00	

N2O-N/N in food/beverage/fuel/other		0.1427			0.0761 Note 46
Area with crop, ha		Total/year 1			
Natural background emissions, kg N2O-N/ha:		1.11			Note 50
		1.44			Note 51
		1.11		6.74	4.12

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER MANURE FROM GRAZING SHEEP	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR OIL 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		36.31 36.31 3.93	1.87
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	7.89 7.89 0.08	0.08
1-10 N leach	0.0327	0.0131	TOTAL N AMOUNTS IN KG AND % LEACHED	55.81 55.81 1.40	0.42
TOTAL	0.0630	0.0276	TOTAL N AMOUNTS IN KG AND %	100.00 100.00	

N2O-N/N in food/beverage/fuel/other		0.1489			0.0653 Note 46
Area with crop, ha		Total/year 1			
Natural background emissions, kg N2O-N/ha:		1.02			Note 50
		1.32			Note 51
		1.02		6.42	3.39

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER GOAT DEEP LITTER	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR OIL AND WINTER WHEAT FOR	GOAT MILK/MEAT GOAT MILK/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		30.82 27.53 3.62	2.11
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	36.64 32.73 0.37	0.37
1-10 N leach	0.0324	0.0175	TOTAL N AMOUNTS IN KG AND % LEACHED	44.49 39.74 1.11	0.33
TOTAL	0.0595	0.0328	TOTAL N AMOUNTS IN KG AND %	111.95 100.00	

N2O-N/N in food/beverage/fuel/other		0.1655			0.0912 Note 46
Area with crop, ha		Total/year 1			
Natural background emissions, kg N2O-N/ha:		1.10			Note 50
		1.42			Note 51
		1.10		6.20	3.91

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER MANURE FROM GRAZING GOATS	TO PRODUCE TO PRODUCE	WINTER RAPESEED FOR OIL AND WINTER WHEAT FOR	GOAT MILK/MEAT GOAT MILK/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		32.72 32.72 4.12	2.80
Year N NH3	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	8.30 8.30 0.08	0.08
1-10 N leach	0.0335	0.0207	TOTAL N AMOUNTS IN KG AND % LEACHED	58.98 58.98 1.47	0.44
TOTAL	0.0662	0.0388	TOTAL N AMOUNTS IN KG AND %	100.00 100.00	

N2O-N/N in food/beverage/fuel/other		0.1736			0.1018 Note 46
Area with crop, ha		Total/year 1			
Natural background emissions, kg N2O-N/ha:		1.04			Note 50
		1.35			Note 51
		1.04		6.72	4.37

SUMMARY N FIXATION FOR N CROP

N CHAIN STARTING WITH AND CONTINUING WITH	NO MANURE GREEN MANURE HIGH N	TO PRODUCE TO PRODUCE	CLOVER GRASS WITHOUT MANURE FOR WINTER WHEAT FOR	HIGH N CROP CATTLE DAIRY	
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	0.0036	0.0036			
TOTAL	0.0344	0.0273			

N2O-N/N in food/beverage/fuel/other		0.1143			0.0905
Area with crop, ha					
Natural background emissions, kg N2O-N/ha:					
		Total/year 1			
		71.97			
		71.97			

N amount in reference crop year 2 after use of N crop as green manure, kg	1839.82				
N amount in reference crop year 1 after synthetic N fertilizer, kg	71.29				
Relative value of green manure, %	2580.69				

N CHAIN STARTING WITH AND CONTINUING WITH	NO MANURE GREEN MANURE LOW N	TO PRODUCE TO PRODUCE	CLOVER GRASS WITHOUT MANURE FOR WINTER WHEAT FOR	LOW N CROP CATTLE DAIRY	
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	0.0036	0.0036			
TOTAL	0.0339	0.0239			

N2O-N/N in food/beverage/fuel/other		0.1672			0.1176
Area with crop, ha					
Natural background emissions, kg N2O-N/ha:					
		Total/year 1			
		54.42			
		54.42			

N amount in reference crop year 2 after use of N crop as green manure, kg	1051.32				
N amount in reference crop year 1 after synthetic N fertilizer, kg	71.29				
Relative value of green manure, %	1474.68				

Note 43  
Note 43

111 Note 45  
18 Note 45  
11 Note 45  
Note 45

0.0905 Note 46  
Note 50  
183 Note 51

Note 47  
Note 47

Note 43  
Note 43

98 Note 45  
15 Note 45  
15 Note 45  
Note 45

0.1176 Note 46  
Note 50  
152 Note 51

Note 47  
Note 47

## SUMMARY FOOD, FUEL, AND N+N FIXATION FOR FODDER AND FOOD

N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER NO MANURE	TO PRODUCE TO PRODUCE	WINTER WHEAT FOR 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		75.08	1.35
Year N NH3	IPCC-1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	2.20	0.02
1-10 N leach	0.0259	0.0174	TOTAL N AMOUNTS IN KG AND % LEACHED	22.72	0.57
TOTAL	0.0259	0.0174	TOTAL N AMOUNTS IN KG AND %	100.00	100.00
N2O-N/N in food/beverage/fuel/other				0.0259	0.0174
Area with crop, ha		Total/year 1		1.00	
Natural background emissions, kg N2O-N/ha:		0.64		2.58	1.94
		0.64			0.0259
N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER NO MANURE	TO PRODUCE TO PRODUCE	WINTER WHEAT FOR 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		75.08	1.35
Year N NH3	IPCC-1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	2.20	0.02
1-10 N leach	0.0259	0.0174	TOTAL N AMOUNTS IN KG AND % LEACHED	22.72	0.57
TOTAL	0.0259	0.0174	TOTAL N AMOUNTS IN KG AND %	100.00	100.00
N2O-N/N in food/beverage/fuel/other				0.0259	0.0174
Area with crop, ha		Total/year 1		1.00	
Natural background emissions, kg N2O-N/ha:		0.64		2.58	1.94
		0.64			0.0259
N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER LIQUID CATTLE MANURE	TO PRODUCE TO PRODUCE	CLOVER GRASS FOR CLOVER GRASS 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		48239	1660
Year N NH3	IPCC-1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	33928	339
1-10 N leach	0.0162	0.0186	TOTAL N AMOUNTS IN KG AND % LEACHED	20989	157
TOTAL	2.1604	2.0293	TOTAL N AMOUNTS IN KG AND %	103155	100.00
N2O-N/N in food/beverage/fuel/other				0.0523	0.0491
Area with crop, ha		Total/year 1		233.38	
Natural background emissions, kg N2O-N/ha:		1138.45		3662	3509
		1138.45			0.0523
N CHAIN STARTING WITH AND CONTINUING WITH	N FERTILIZER LIQUID CATTLE MANURE	TO PRODUCE TO PRODUCE	CLOVER GRASS FOR CLOVER GRASS 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		14684	294
Year N NH3	IPCC-1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	5318	53
1-10 N leach	0.0162	0.0186	TOTAL N AMOUNTS IN KG AND % LEACHED	3271	25
TOTAL	0.3672	0.3460	TOTAL N AMOUNTS IN KG AND %	23273	100.00
N2O-N/N in food/beverage/fuel/other				0.0292	0.0275
Area with crop, ha		Total/year 1		43.97	
Natural background emissions, kg N2O-N/ha:		214.50		644	619
		214.50			0.0292

SUMMARY CATTLE RATIO OF N2O-N TO N IN FIRST CROP  
 ACCORDING TO IPCC 1996 IPCC 2006  
 MIN MAX MIN MAX  
 FIRST YEAR 0.0195 0.0307 0.0162 0.0254  
 TOTAL 0.0347 0.0559 0.0280 0.0413

N2O-N emission N2O-N emission  
 IPCC 1996 IPCC 2006  
 MIN MAX MIN MAX  
 2.98 4.80 2.40 3.54

MIN MAX MIN MAX  
 0.0613 0.1086 0.0494 0.0801

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

MIN MAX  
 0.97 1.21

MIN MAX  
 0.97 1.27

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

4.16 5.78 3.52 4.52

SUMMARY PIGS RATIO OF N2O-N TO N IN FIRST CROP  
 ACCORDING TO IPCC 1996 IPCC 2006  
 MIN MAX MIN MAX  
 FIRST YEAR 0.0195 0.0281 0.0159 0.0228  
 TOTAL 0.0295 0.0464 0.0233 0.0351

N2O-N emission N2O-N emission  
 IPCC 1996 IPCC 2006  
 MIN MAX MIN MAX  
 2.53 3.98 2 3.01

MIN MAX MIN MAX  
 0.0439 0.0670 0.0351 0.0506

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

MIN MAX  
 1.01 1.07

MIN MAX  
 1.01 1.07

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

3.60 5.00 3.01 4.02

SUMMARY POULTRY RATIO OF N2O-N TO N IN FIRST CROP  
 ACCORDING TO IPCC 1996 IPCC 2006  
 MIN MAX MIN MAX  
 FIRST YEAR 0.0192 0.0311 0.0154 0.0258  
 TOTAL 0.0280 0.0564 0.0200 0.0416

N2O-N emission N2O-N emission  
 IPCC 1996 IPCC 2006  
 MIN MAX MIN MAX  
 2.4 4.84 1.72 3.57

MIN MAX MIN MAX  
 0.0386 0.1110 0.0297 0.0819

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

MIN MAX  
 0.86 1.15

MIN MAX  
 0.86 1.15

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

3.38 5.82 2.58 4.55

SUMMARY SHEEP AND GOATS RATIO OF N2O-N TO N IN FIRST CROP  
 ACCORDING TO IPCC 1996 IPCC 2006  
 MIN MAX MIN MAX  
 FIRST YEAR 0.0316 0.0335 0.0131 0.0207  
 TOTAL 0.0595 0.0662 0.0276 0.0388

N2O-N emission N2O-N emission  
 IPCC 1996 IPCC 2006  
 MIN MAX MIN MAX  
 5.1 5.68 2.37 3.33

MIN MAX MIN MAX  
 0.1427 0.1736 0.0653 0.1018

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

MIN MAX  
 1.02 1.11

MIN MAX  
 1.02 1.11

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

6.20 6.74 3.39 4.37

SUMMARY FODDER RATIO OF N2O-N TO N IN FIRST CROP  
 ACCORDING TO IPCC 1996 IPCC 2006  
 MIN MAX MIN MAX  
 FIRST YEAR 0.0192 0.0335 0.0131 0.0258  
 TOTAL 0.0280 0.0662 0.0200 0.0416

N2O-N emission N2O-N emission  
 IPCC 1996 IPCC 2006  
 MIN MAX MIN MAX  
 2.40 5.68 1.72 3.57

MIN MAX MIN MAX  
 0.0386 0.1736 0.0297 0.1018

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

MIN MAX  
 0.86 1.27

MIN MAX  
 0.86 1.27

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

3.38 6.74 2.58 4.55