

Note 33

Crop, fodder/food	WRS	WWH	WWB	WBA	WYB	TRY	SBA	SWH	OAT	MCC	MCW	GRO	GCR	GHP	GRP	CGR0	CONC
Crop #	22	11	13	10	14	14	16	1	2	3	5	216	263	261	2520	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	1.05	0.83	1.33	0.44	0.81	-2.75
N digestibility, food/fodder crops	0.84	0.67	0.68	0.66	0.62	0.62	0.65	0.65	0.67	0.64	0.62	0.63	0.78	0.80	0.66	0.78	1.00
<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	0.11	0.04	0.11	0.00	0.00	0.87
<NUE/e> addition from straw	0.09	0.07	0.07	0.08	0.11	0.10	0.08	0.05	0.05	0.07	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	117	141	118	118	93	140	160	309	199	21	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>	0.40	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	0.83
<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
<NUE/e> addition from straw	0.09	0.07	0.07	0.08	0.11	0.10	0.08	0.05	0.07	0.00
Recalculated N norm, kg N/ha	144	157	198	147	117	141	118	118	93	140

<NUE/e> amounts from crop res	0.02	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	N	Cattle manure	Pig manure	Poultry manure	Sheep manure	Goat manure	Green	Green	None
Manure handling	None	None	None	None	None	None	None	None	None	None
#	0	1	21	32	41	53	63	64	71	72
Manure+straw, relative	1.000	1.016	1.159	1.000	1.000	1.162	1.000	1.000	1.000	1.000
Vol/NH3 House	0.000	0.080	0.060	0.000	0.100	0.250	0.400	0.000	0.000	0.000
Vol/NH3 Store	0.000	0.022	0.300	0.000	0.000	0.150	0.150	0.000	0.000	0.000
% use of field store	0.000	0.022	0.250	0.250	0.250	0.250	0.250	0.070	0.250	0.250
Vol/NH3 Field	0.000	0.022	0.250	0.250	0.250	0.250	0.250	0.070	0.250	0.250
N efficiency	0.000	1.000	0.650	0.450	0.650	0.450	0.450	0.450	0.700	0.400
N-Vol/NH3 efficiency	1.022	0.933	0.867	0.600	0.699	0.867	0.867	0.484	0.933	0.533

Use	Kind	Waste	Waste	Cattle	Cattle	Pig	Poultry	Goat	N crop	N crop	Food/	Fuel/
Kind	Kind	moved	in field	Dairy	Beef	Pork	Meat	Milk/mutton	high N	low N	beverage	other
#	-1	0	21	22	32	42	43	51	71	72	8	9
Fodder to food	N eff	NON	0.264	0.227	0.418	0.510	0.241	0.096	0.096	0.096	0.096	0.096
Fodder to food	N eff	ORG	0.264	0.146	0.269	0.328	0.272	0.142	0.142	0.142	0.142	0.142
Fodder to food	ND eff	NON	0.351	0.310								
Fodder to food	ND eff	ORG	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 Solid manure and deep litter	0 0.0010 0	0 0.0050 0
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 0.0200 0
Grazing, others	0 0.0200 0	0 0.0100 0
Volatilisation/NH3	0.0100 0.0100 0.0100	0.0100 0.0100 0.0100
Crop residues	0 0.0000 0.0125	0 0.0000 0.0100
N fixing crops	0 0.0000 0.0125	0 0.0000 0.0000
Leaching	0.0250 0.0250 0.0250	0.0075 0.0075 0.0075

Note 42

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

Year

Fertilizer/manure
#

Store
1/0

Amounts
Store

Field

Or-
ganic
1/0

Nhorm
proportion, %

Crop
#

Straw
used
1/0

Cereal
benefit
1/0

Fodder:
Uses #21-61

N crop
#71/

Fuel/
other
#9

Manure
handling

Final
N a-

N2O-N emission
IPCC 1996

N2O-N emission
IPCC 2006

Total
Total

Note 44
Note 44
Note 44

Total Year 1-10	N NH3 N leach	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 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N2O-N/N in food/beverage/fuel/other

0.2652

0.1610

Note 46

Year 1	N	1	1	100.0	100.0	0	100	229	1	0	97.8	21	40.0	11.8	0.0	0.0	0.0	0.0	0.0	0.0	21	28.2	1.38	2.87	1.24	1.72	Note 47
	Vol/NH3	N	YES	0.0	2.2	NON	100.00	WRB	1.000	NO	57.8	Cattle	0.84								0.0 Cattle	2.3	0.04	0.0125	0.04	0.0100	Note 48
	N leach		1.022	1.000	ORG	1.00	1.000		0.591	0.0	57.8	Dairy	2							10.9	Liquid	0.0	1.45	0.0010	0.43	0.0050	Note 49
Year 2	N	21	1	26.4	25.8	0	100	11	0	0	19.3	21	7.2	1.7	0.0	0.0	0.0	0.0	0.0	0.0	21	5.5	0.28	0.66	0.25	0.42	Note 47
	Vol/NH3	Cattle	YES	0.6	6.4	NON	100.00	WWH	1.000	NO	12.1	Cattle	0.67								0.0 Cattle	0.4	0.07	0.0125	0.07	0.0100	Note 48
	N leach	Liquid	0.933	1.016	ORG	1.00	1.000		0.627	0.0	12.1	Dairy	2							2.6	Liquid	0.0	0.30	0.0010	0.09	0.0050	Note 49
Year 3	N	21	1	5.2	5.0	0	100	11	0	0	3.8	21	1.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	21	1.1	0.05	0.13	0.05	0.08	Note 47
	Vol/NH3	Cattle	YES	0.1	1.3	NON	100.00	WWH	1.000	NO	2.4	Cattle	0.67								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	2.4	Dairy	2							0.5	Liquid	0.0	0.06	0.0010	0.02	0.0050	Note 49
Year 4	N	21	1	1.0	1.0	0	100	1	0	0	0.7	21	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	21	0.2	0.01	0.03	0.01	0.02	Note 47
	Vol/NH3	Cattle	YES	0.0	0.2	NON	100.00	SBA	1.000	NO	0.5	Cattle	0.65								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	0.5	Dairy	2							0.1	Liquid	0.0	0.01	0.0010	0.00	0.0050	Note 49
Year 5	N	21	1	0.2	0.2	0	100	10	0	0	0.1	21	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.1	Cattle	0.66								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	0.00	0.0010	0.00	0.0050	Note 49
Year 6	N	21	1	0.0	0.0	0	100	229	1	0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WRB	1.000	NO	0.0	Cattle	0.84								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	0.00	0.0010	0.00	0.0050	Note 49
Year 7	N	21	1	0.0	0.0	0	100	11	0	0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Cattle	0.67								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	0.00	0.0010	0.00	0.0050	Note 49
Year 8	N	21	1	0.0	0.0	0	100	11	0	0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Cattle	0.67								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	0.00	0.0010	0.00	0.0050	Note 49
Year 9	N	21	1	0.0	0.0	0	100	1	0	0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	SBA	1.000	NO	0.0	Cattle	0.65								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	0.00	0.0010	0.00	0.0050	Note 49
Year 10	N	21	1	0.0	0.0	0	100	10	0	0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Cattle	0.66								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	0.00	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

0.15

0.03

0.01

0.00

0.00

0.00

0.00

0.00

0.00

0.88

1.27

Note 50

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:

Value

0.0000

0.00

1.00

Kind of source

Total IPCC and non IPCC N2O

3.69

3.69

4.57

Note 51

2.24

2.24

3.12

Note 51

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

Year

Fertilizer/manure
#

Store
1/0

Amounts
Store

Field
1/0

Or-
ganic
1/0

Nhorm
proportion,
%

Crop
#

Straw
used
1/0

Cereal
benefit
1/0

Fodder:
Uses #21-61
Fed

N crop
#71/
#72

Food
#8

Fuel/
bev
#9

Manure
handling
#

Final
N a-
mounts

N2O-N emission
IPCC 1996

N2O-N emission
IPCC 2006

Total
Each

Note 44
Note 44
Note 44
Note 44

Total Year 1-10	N NH3 N leach	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 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N2O-N/N in food/beverage/fuel/other

0.2914

0.1632

Note 46

Year 1	N	1	1	100.0	100.0	0	100	229	1	0	97.8	21	40.0	11.8	0.0	0.0	0.0	0.0	0.0	22	28.2	1.64	3.12	1.25	1.72	Note 47
	Vol/NH3	N	YES	0.0	2.2	NON	100.00	WRB	1.000	NO	57.8	Cattle	0.84							0.0	1.4	0.04	0.0125	0.04	0.0100	Note 48
	N leach		1.022	1.000	ORG	1.00	1.000		0.591	0.0	57.8	Dairy	2						10.9	Sep	0.0	1.45	0.0105	0.43	0.0050	Note 49
Year 2	N	22	1	27.2	24.9	0	100	11	0	0	18.7	21	6.5	1.5	0.0	0.0	0.0	0.0	0.0	22	4.9	0.31	0.71	0.24	0.42	Note 47
	Vol/NH3	Cattle	YES	2.3	6.2	NON	100.00	WWH	1.000	NO	12.2	Cattle	0.67							0.0	0.2	0.09	0.0125	0.09	0.0100	Note 48
	N leach	Sep	0.867	1.016	ORG	1.00	1.000		0.653	0.0	12.2	Dairy	2						2.5	Sep	0.0	0.31	0.0105	0.09	0.0050	Note 49
Year 3	N	22	1	4.8	4.4	0	100	11	0	0	3.3	21	1.1	0.3	0.0	0.0	0.0	0.0	0.0	22	0.9	0.06	0.12	0.04	0.07	Note 47
	Vol/NH3	Cattle	YES	0.4	1.1	NON	100.00	WWH	1.000	NO	2.1	Cattle	0.67							0.0	0.0	0.02	0.0125	0.02	0.0100	Note 48
	N leach	Sep	0.867	1.016	ORG	1.00	1.000		0.653	0.0	2.1	Dairy	2						0.4	Sep	0.0	0.05	0.0105	0.02	0.0050	Note 49
Year 4	N	22	1	0.8	0.8	0	100	1	0	0	0.6	21	0.2	0.0	0.0	0.0	0.0	0.0	0.0	22	0.2	0.01	0.02	0.01	0.01	Note 47
	Vol/NH3	Cattle	YES	0.1	0.2	NON	100.00	SBA	1.000	NO	0.4	Cattle	0.65							0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016	ORG	1.00	1.000		0.653	0.0	0.4	Dairy	2						0.1	Sep	0.0	0.01	0.0105	0.00	0.0050	Note 49
Year 5	N	22	1	0.1	0.1	0	100	10	0	0	0.1	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.1	Cattle	0.66							0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016	ORG	1.00	1.000		0.653	0.0	0.1	Dairy	2						0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year 6	N	22	1	0.0	0.0	0	100	229	1	0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WRB	1.000	NO	0.0	Cattle	0.84							0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016	ORG	1.00	1.000		0.653	0.0	0.0	Dairy	2						0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year 7	N	22	1	0.0	0.0	0	100	11	0	0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Cattle	0.67							0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016	ORG	1.00	1.000		0.653	0.0	0.0	Dairy	2						0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year 8	N	22	1	0.0	0.0	0	100	11	0	0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Cattle	0.67							0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016	ORG	1.00	1.000		0.653	0.0	0.0	Dairy	2						0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year 9	N	22	1	0.0	0.0	0	100	1	0	0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	SBA	1.000	NO	0.0	Cattle	0.65							0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016	ORG	1.00	1.000		0.653	0.0	0.0	Dairy	2						0.0	Sep	0.0	0.00	0.0105	0.00	0.0050	Note 49
Year 10	N	22	1	0.0	0.0	0	100	10	0	0	0.0	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Cattle	0.66							0.0	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016	ORG	1.00	1.000		0.653	0.0	0.0	Dairy	2						0.0	Sep	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

0.13

0.02

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

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

0.0000

0.00

1.00

Kind of source

Total IPCC and non IPCC N2O

3.98

3.98

4.84

Note 51

2.23

2.23

3.09

Note 51

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

Year

Fertilizer/manure
#

Store
1/0

Amounts
Store

Field
1/0

Or-
ganic
1/0

Nnorm
proportion, %

Crop
#

Straw
used
1/0

Fodder:
Uses #21-61
Fed

N crop
#71/
#72

Fuel/
bev
#8

Manure
handling
#

Final
N a-
mounts

N2O-N emission
IPCC 1996

N2O-N emission
Each

Total

Note 44
Note 44
Note 44
Note 44

Total Year 1-10	N NH3 N leach	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 %									
		ACCORDING TO										IPCC 2006										12.4										14.3										73.3									
		FIRST YEAR										0.0432										73.7										73.3										100.0									
		TOTAL										0.0570										100.5										100.0																			

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

0.3022

0.1841

Note 46

Year 1	N	1	1	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	1.39	2.88	1.25	1.73
	Vol/NH3	N	YES	0.0	0.0	2.2	NON	100.00	WRB	1.000	NO	57.8	Cattle	0.84						0.0	Cattle	2.4	0.05	0.0100	Note 48
	N leach		1.022	1.000		ORG		1.00	1.000	0.591	0.0	57.8	Beef	2						10.9	Liquid	0.0	1.45	0.0050	Note 49
Year 2	N	21	1	27.7	0	27.0	0	100	11	0	0	20.3	22	7.6	1.6	0.0	0.0	0.0	0.0	21	6.0	0.29	0.69	0.26	0.44
	Vol/NH3	Cattle	YES	0.6	0.6	6.8	NON	100.00	WWH	1.000	NO	12.7	Cattle	0.67						0.0	Cattle	0.5	0.08	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG		1.00	1.000	0.627	0.0	12.7	Beef	2						2.8	Liquid	0.0	0.32	0.0050	Note 49
Year 3	N	21	1	5.6	0	5.5	0	100	11	0	0	4.1	22	1.5	0.3	0.0	0.0	0.0	0.0	21	1.2	0.06	0.14	0.05	0.09
	Vol/NH3	Cattle	YES	0.1	0.1	1.4	NON	100.00	WWH	1.000	NO	2.6	Cattle	0.67						0.0	Cattle	0.1	0.02	0.0100	Note 48
	N leach	Liquid	0.933	1.016		ORG		1.00	1.000	0.627	0.0	2.6	Beef	2						0.6	Liquid	0.0	0.06	0.0050	Note 49
Year 4	N	21	1	1.1	0	1.1	0	100	1	0	0	0.8	22	0.3	0.1	0.0	0.0	0.0	0.0	21	0.2	0.01	0.03	0.01	0.02
	Vol/NH3	Cattle	YES	0.0	0.0	0.3	NON	100.00	SBA	1.000	NO	0.5	Cattle	0.65						0.0	Cattle	0.0	0.00	0.0125	0.00
	N leach	Liquid	0.933	1.016		ORG		1.00	1.000	0.627	0.0	0.5	Beef	2						0.1	Liquid	0.0	0.01	0.0050	Note 49
Year 5	N	21	1	0.2	0	0.2	0	100	10	0	0	0.2	22	0.1	0.0	0.0	0.0	0.0	0.0	21	0.1	0.00	0.01	0.00	0.00
	Vol/NH3	Cattle	YES	0.0	0.0	0.1	NON	100.00	WBA	1.000	NO	0.1	Cattle	0.66						0.0	Cattle	0.0	0.00	0.0125	0.00
	N leach	Liquid	0.933	1.016		ORG		1.00	1.000	0.627	0.0	0.1	Beef	2						0.0	Liquid	0.0	0.00	0.0050	Note 49
Year 6	N	21	1	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	21	0.0	0.00	0.00	0.00	0.00
	Vol/NH3	Cattle	YES	0.0	0.0	0.0	NON	100.00	WRB	1.000	NO	0.0	Cattle	0.84						0.0	Cattle	0.0	0.00	0.0125	0.00
	N leach	Liquid	0.933	1.016		ORG		1.00	1.000	0.627	0.0	0.0	Beef	2						0.0	Liquid	0.0	0.00	0.0050	Note 49
Year 7	N	21	1	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	21	0.0	0.00	0.00	0.00	0.00
	Vol/NH3	Cattle	YES	0.0	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Cattle	0.67						0.0	Cattle	0.0	0.00	0.0125	0.00
	N leach	Liquid	0.933	1.016		ORG		1.00	1.000	0.627	0.0	0.0	Beef	2						0.0	Liquid	0.0	0.00	0.0050	Note 49
Year 8	N	21	1	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	21	0.0	0.00	0.00	0.00	0.00
	Vol/NH3	Cattle	YES	0.0	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Cattle	0.67						0.0	Cattle	0.0	0.00	0.0125	0.00
	N leach	Liquid	0.933	1.016		ORG		1.00	1.000	0.627	0.0	0.0	Beef	2						0.0	Liquid	0.0	0.00	0.0050	Note 49
Year 9	N	21	1	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	21	0.0	0.00	0.00	0.00	0.00
	Vol/NH3	Cattle	YES	0.0	0.0	0.0	NON	100.00	SBA	1.000	NO	0.0	Cattle	0.65						0.0	Cattle	0.0	0.00	0.0125	0.00
	N leach	Liquid	0.933	1.016		ORG		1.00	1.000	0.627	0.0	0.0	Beef	2						0.0	Liquid	0.0	0.00	0.0050	Note 49
Year 10	N	21	1	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	21	0.0	0.00	0.00	0.00	0.00
	Vol/NH3	Cattle	YES	0.0	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Cattle	0.66						0.0	Cattle	0.0	0.00	0.0125	0.00
	N leach	Liquid	0.933	1.016		ORG		1.00	1.000	0.627	0.0	0.0	Beef	2						0.0	Liquid	0.0	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

0.16

0.03

0.01

0.00

0.00

0.00

0.00

0.00

0.00

0.89

1.29

Note 50

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:

Value

0.0000

0.00

1.00

Kind of source

Total IPCC and non IPCC N2O

3.74

3.74

4.64

Note 51

2.28

2.28

3.17

Note 51

Note 51

Note 51

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

Year	Fertilizer/manure		Or-ganic 1/0	Nnorm proportion, %	Crop #	Cereal benefit 1/0	Straw used 1/0	Crop use & leach	Use #	Fodder:		N crop #71/ Food #72	Food/ bev #8	Fuel/ other #9	Manure handling #	Final N a- mounts	N2O-N emission		N2O-N emission IPCC 2006	Total	Total	N2O-N emission IPCC 1996	Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission Each	Total	Total	N2O-N emission
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N2O-N/N in food/beverage/fuel/other

0.3334

0.1868

Note 46

Year 1	N	1	1	100.0	100.0	0	100	229	1	0	97.8	22	40.0	10.4	0.0	0.0	0.0	22	29.6	1.65	3.14	1.25	1.73	Note 47
	Vol/NH3	N	YES	0.0	2.2	NON	100.00	WRB	1.000	NO	57.8	Cattle	0.84					0.0	Cattle	0.04	0.0125	0.04	0.0100	Note 48
	N leach		1.022	1.000	ORG	1.00	1.000		0.591	0.0	57.8	Beef	2			10.9	Sep	0.0	1.45	0.0105	0.43	0.0050	Note 49	
Year 2	N	22	1	28.6	26.1	0	100	11	0	0	19.6	22	6.8	1.4	0.0	0.0	0.0	22	5.4	0.33	0.74	0.25	0.44	Note 47
	Vol/NH3	Cattle	YES	2.4	6.5	NON	100.00	WWH	1.000	NO	12.8	Cattle	0.67					0.0	Cattle	0.09	0.0125	0.09	0.0100	Note 48
	N leach	Sep	0.867	1.016	ORG	1.00	1.000		0.653	0.0	12.8	Beef	2				2.7	Sep	0.0	0.32	0.0105	0.10	0.0050	Note 49
Year 3	N	22	1	5.2	4.8	0	100	11	0	0	3.6	22	1.2	0.3	0.0	0.0	0.0	22	1.0	0.06	0.14	0.05	0.08	Note 47
	Vol/NH3	Cattle	YES	0.4	1.2	NON	100.00	WWH	1.000	NO	2.3	Cattle	0.67					0.0	Cattle	0.02	0.0125	0.02	0.0100	Note 48
	N leach	Sep	0.867	1.016	ORG	1.00	1.000		0.653	0.0	2.3	Beef	2				0.5	Sep	0.0	0.06	0.0105	0.02	0.0050	Note 49
Year 4	N	22	1	0.9	0.9	0	100	1	0	0	0.6	22	0.2	0.0	0.0	0.0	0.0	22	0.2	0.01	0.02	0.01	0.01	Note 47
	Vol/NH3	Cattle	YES	0.1	0.2	NON	100.00	SBA	1.000	NO	0.4	Cattle	0.65					0.0	Cattle	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016	ORG	1.00	1.000		0.653	0.0	0.4	Beef	2				0.1	Sep	0.01	0.0105	0.00	0.0050	Note 49	
Year 5	N	22	1	0.2	0.2	0	100	10	0	0	0.1	22	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.1	Cattle	0.66					0.0	Cattle	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016	ORG	1.00	1.000		0.653	0.0	0.1	Beef	2				0.0	Sep	0.00	0.0105	0.00	0.0050	Note 49	
Year 6	N	22	1	0.0	0.0	0	100	229	1	0	0.0	22	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WRB	1.000	NO	0.0	Cattle	0.84					0.0	Cattle	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016	ORG	1.00	1.000		0.653	0.0	0.0	Beef	2				0.0	Sep	0.00	0.0105	0.00	0.0050	Note 49	
Year 7	N	22	1	0.0	0.0	0	100	11	0	0	0.0	22	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Cattle	0.67					0.0	Cattle	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016	ORG	1.00	1.000		0.653	0.0	0.0	Beef	2				0.0	Sep	0.00	0.0105	0.00	0.0050	Note 49	
Year 8	N	22	1	0.0	0.0	0	100	11	0	0	0.0	22	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Cattle	0.67					0.0	Cattle	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016	ORG	1.00	1.000		0.653	0.0	0.0	Beef	2				0.0	Sep	0.00	0.0105	0.00	0.0050	Note 49	
Year 9	N	22	1	0.0	0.0	0	100	1	0	0	0.0	22	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	SBA	1.000	NO	0.0	Cattle	0.65					0.0	Cattle	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016	ORG	1.00	1.000		0.653	0.0	0.0	Beef	2				0.0	Sep	0.00	0.0105	0.00	0.0050	Note 49	
Year 10	N	22	1	0.0	0.0	0	100	10	0	0	0.0	22	0.0	0.0	0.0	0.0	0.0	22	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Cattle	0.66					0.0	Cattle	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Sep	0.867	1.016	ORG	1.00	1.000		0.653	0.0	0.0	Beef	2				0.0	Sep	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

0.14

0.03

0.01

0.00

0.00

0.00

0.00

0.00

0.00

0.87

1.25

Note 50

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:

Value

0.0000

0.00

1.00

Kind of source

Total IPCC and non IPCC N2O

4.05

4.05

4.91

Note 51

2.27

2.27

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 BEEF
CATTLE BEEF

Year

Fertilizer/manure
#

Store
1/0

Amounts
Store

Field
1/0

Or-
ganic
1/0

Nnorm
proportion, %

Crop
#

Crop
use &
leach

Straw
used
1/0

Cereal
benefit
1/0

Fodder:
Uses #21-61

N crop
#71/

Fuel/
bev
#8

Fuel/
other
#9

Manure
handling

Final
N a-

N2O-N emission
IPCC 1996

N2O-N emission
IPCC 2006

Total
Total

Note 43
Note 43

Note 44
Note 44

Note 44
Note 44

Note 45
Note 45

Total Year 1-10	N NH3 N leach	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 %									
		ACCORDING TO										IPCC 1996										IPCC 2006																													
		FIRST YEAR										0.0850										0.0432																													
		TOTAL										0.1068										0.0562																													

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

0.3762

0.1979

Note 46

Year 1	N	1	1	100.0	100.0	0	100	229	1	0	97.8	22	40.0	10.4	0.0	0.0	0.0	0.0	23	29.6	1.92	3.40	1.25	1.73
	Vol/NH3	N	YES	0.0	2.2	NON	100.00	WRB	1.000	NO	57.8	Cattle	0.84						0.0	1.8	0.04	0.0125	0.04	
	N leach		1.022	1.000		ORG	1.00	1.000	0.591	0.0	57.8	Beef	2					10.9	0.0	1.45	0.0200	0.43		
Year 2	N	23	1	32.2	22.6	0	100	11	0	0	16.9	22	4.1	0.8	0.0	0.0	0.0	0.0	23	3.2	0.30	0.78	0.21	
	Vol/NH3	Cattle	YES	9.7	5.6	NON	100.00	WWH	1.000	NO	12.9	Cattle	0.67						0.0	0.2	0.16	0.0125	0.16	
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.760	0.0	12.9	Beef	2					2.3	0.0	0.32	0.0200	0.10		
Year 3	N	23	1	3.5	2.5	0	100	11	0	0	1.8	22	0.4	0.1	0.0	0.0	0.0	0.0	23	0.4	0.03	0.08	0.02	
	Vol/NH3	Cattle	YES	1.1	0.6	NON	100.00	WWH	1.000	NO	1.4	Cattle	0.67						0.0	0.0	0.02	0.0125	0.02	
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.760	0.0	1.4	Beef	2					0.3	0.0	0.03	0.0200	0.01		
Year 4	N	23	1	0.4	0.3	0	100	1	0	0	0.2	22	0.0	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.01	0.00	
	Vol/NH3	Cattle	YES	0.1	0.1	NON	100.00	SBA	1.000	NO	0.2	Cattle	0.65						0.0	0.0	0.00	0.0125	0.00	
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.760	0.0	0.2	Beef	2					0.0	0.0	0.00	0.0200	0.00		
Year 5	N	23	1	0.0	0.0	0	100	10	0	0	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Cattle	0.66						0.0	0.0	0.00	0.0125	0.00	
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.760	0.0	0.0	Beef	2					0.0	0.0	0.00	0.0200	0.00		
Year 6	N	23	1	0.0	0.0	0	100	229	1	0	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WRB	1.000	NO	0.0	Cattle	0.84						0.0	0.0	0.00	0.0125	0.00	
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.760	0.0	0.0	Beef	2					0.0	0.0	0.00	0.0200	0.00		
Year 7	N	23	1	0.0	0.0	0	100	11	0	0	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Cattle	0.67						0.0	0.0	0.00	0.0125	0.00	
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.760	0.0	0.0	Beef	2					0.0	0.0	0.00	0.0200	0.00		
Year 8	N	23	1	0.0	0.0	0	100	11	0	0	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Cattle	0.67						0.0	0.0	0.00	0.0125	0.00	
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.760	0.0	0.0	Beef	2					0.0	0.0	0.00	0.0200	0.00		
Year 9	N	23	1	0.0	0.0	0	100	1	0	0	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	SBA	1.000	NO	0.0	Cattle	0.65						0.0	0.0	0.00	0.0125	0.00	
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.760	0.0	0.0	Beef	2					0.0	0.0	0.00	0.0200	0.00		
Year 10	N	23	1	0.0	0.0	0	100	10	0	0	0.0	22	0.0	0.0	0.0	0.0	0.0	0.0	23	0.0	0.00	0.00	0.00	
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Cattle	0.66						0.0	0.0	0.00	0.0125	0.00	
	N leach	Deep	0.600	1.159		ORG	1.00	1.000	0.760	0.0	0.0	Beef	2					0.0	0.0	0.00	0.0200	0.00		

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

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

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

0.0000

0.00

1.00

Kind of source

Total IPCC and non IPCC N2O

4.27

4.27

5.06

Note 51

2.25

2.25

3.04

Note 51

Note 51

Note 51

Note 51

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

Year

Fertilizer/manure
#

Store
Name

1/0

Store
Field

1/0

Or-
ganic

Norm
proportion, %

Crop
#

Straw
used

1/0

Cereal
benefit

1/0

Use
Name

Fodder:
Fed

Uses #21-61
Fed

N crop
#71/

Food
#72

Fuel/
bev
#8

other
#9

Manure
handling

Final
N a-

N2O-N emission
IPCC 1996

N2O-N emission
IPCC 2006

Total

Total N		RATIO OF N2O-N TO N IN FIRST CROP				TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED				19.6	1.63	3.45	1.43	2.07	Note 45
Year	NH3	ACCORDING TO		IPCC 1996		IPCC 2006		TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		12.4	0.12	12.4	0.12	Note 45	
1-10	N leach	FIRST YEAR		0.0720		0.0426		TOTAL N AMOUNTS IN KG AND % LEACHED		68.1	1.70	68.1	0.51	Note 45	
TOTAL				0.0863		0.0516		TOTAL N AMOUNTS IN KG AND %		100.0		100.0		Note 45	

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

0.1762

0.1055

Note 46

Year 1	N	1	1	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	31	23.3	1.38	2.88	1.21	1.70	Note 47	
	Vol/NH3	N	YES	0.0	2.2	NON	100.00	WRB	1.000	NO	57.8	Pig	0.84							0.0	Pig	3.3	0.05	0.0125	0.05	0.0100	Note 48
	N leach		1.022	1.000	ORG	1.00	1.000		0.591	0.0	57.8	Pork	3						10.9	Liquid	0.0	1.45	0.0010	0.43	0.0050	Note 49	
Year 2	N	31	1	20.0	19.5	0	100	11	0	0	14.6	32	5.8	2.4	0.0	0.0	0.0	0.0	0.0	31	3.4	0.21	0.49	0.19	0.31	Note 47	
	Vol/NH3	Pig	YES	0.5	4.9	NON	100.00	WWH	1.000	NO	8.8	Pig	0.67							0.0	Pig	0.5	0.06	0.0125	0.06	0.0100	Note 48
	N leach	Liquid	1.000	1.000	ORG	1.00	1.000		0.600	0.0	8.8	Pork	3						2.0	Liquid	0.0	0.22	0.0010	0.07	0.0050	Note 49	
Year 3	N	31	1	2.9	2.8	0	100	11	0	0	2.1	32	0.9	0.4	0.0	0.0	0.0	0.0	0.0	31	0.5	0.03	0.07	0.03	0.05	Note 47	
	Vol/NH3	Pig	YES	0.1	0.7	NON	100.00	WWH	1.000	NO	1.3	Pig	0.67							0.0	Pig	0.1	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Liquid	1.000	1.000	ORG	1.00	1.000		0.600	0.0	1.3	Pork	3						0.3	Liquid	0.0	0.03	0.0010	0.01	0.0050	Note 49	
Year 4	N	31	1	0.4	0.4	0	100	1	0	0	0.3	32	0.1	0.1	0.0	0.0	0.0	0.0	0.0	31	0.1	0.00	0.01	0.00	0.01	Note 47	
	Vol/NH3	Pig	YES	0.0	0.1	NON	100.00	SBA	1.000	NO	0.2	Pig	0.65							0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	1.000	1.000	ORG	1.00	1.000		0.600	0.0	0.2	Pork	3						0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49	
Year 5	N	31	1	0.1	0.1	0	100	10	0	0	0.0	32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31	0.0	0.00	0.00	0.00	0.00	Note 47	
	Vol/NH3	Pig	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Pig	0.66							0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	1.000	1.000	ORG	1.00	1.000		0.600	0.0	0.0	Pork	3						0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49	
Year 6	N	31	1	0.0	0.0	0	100	229	1	0	0.0	32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31	0.0	0.00	0.00	0.00	0.00	Note 47	
	Vol/NH3	Pig	YES	0.0	0.0	NON	100.00	WRB	1.000	NO	0.0	Pig	0.84							0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	1.000	1.000	ORG	1.00	1.000		0.600	0.0	0.0	Pork	3						0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49	
Year 7	N	31	1	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	31	0.0	0.00	0.00	0.00	0.00	Note 47	
	Vol/NH3	Pig	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Pig	0.67							0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	1.000	1.000	ORG	1.00	1.000		0.600	0.0	0.0	Pork	3						0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49	
Year 8	N	31	1	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	31	0.0	0.00	0.00	0.00	0.00	Note 47	
	Vol/NH3	Pig	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Pig	0.67							0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	1.000	1.000	ORG	1.00	1.000		0.600	0.0	0.0	Pork	3						0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49	
Year 9	N	31	1	0.0	0.0	0	100	1	0	0	0.0	32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31	0.0	0.00	0.00	0.00	0.00	Note 47	
	Vol/NH3	Pig	YES	0.0	0.0	NON	100.00	SBA	1.000	NO	0.0	Pig	0.65							0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	1.000	1.000	ORG	1.00	1.000		0.600	0.0	0.0	Pork	3						0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49	
Year 10	N	31	1	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	31	0.0	0.00	0.00	0.00	0.00	Note 47	
	Vol/NH3	Pig	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Pig	0.66							0.0	Pig	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	1.000	1.000	ORG	1.00	1.000		0.600	0.0	0.0	Pork	3						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

0.12

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

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

0.0000

0.00

1.00

Kind of source

Total IPCC and non IPCC N2O

3.45

3.45

4.29

Note 51

2.07

2.07

2.90

Note 51

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

Year

Fertilizer/manure
#

Store
1/0

Amounts
Store

Field
1/0

Or-
ganic
1/0

Nhorm
proportion, %

Crop
#

Straw
used
1/0

Fodder:
Uses #21-61
Fed

N crop
#71/
#72

Fuel/
bev
#8

Manure
handling
#

Final
N a-
mounts

N2O-N emission
IPCC 1996

N2O-N emission
Each

Total

Year 44
Note 44

Year 44
Note 44

Total Year 1-10 N leach	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 %																							
	ACCORDING TO										IPCC 2006										23.0												23.0										9.7										9.7											
	FIRST YEAR										0.0716										0.0419												67.3												67.3										67.3									
	TOTAL										0.0842										0.0497												100.0												100.0										100.0									

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

0.1465

0.0864

Note 46

Year 1	N	1	1	100.0	100.0	0	100	229	1	0	97.8	42	40.0	20.4	0.0	0.0	0.0	0.0	19.6	1.38	2.86	1.20	1.68	Note 47
	Vol/NH3	N	YES	0.0	2.2	NON	100.00	WRB	1.000	NO	57.8	Poultry	0.84						2.0	0.04	0.0125	0.04	0.0100	Note 48
	N leach		1.022	1.000	ORG	1.00	1.000		0.591	0.0	57.8	Meat	4					10.9	Liquid	0.0	1.45	0.0010	0.43	0.0050
Year 2	N	41	1	17.6	17.3	0	100	11	0	0	13.0	42	4.5	2.3	0.0	0.0	0.0	0.0	2.2	0.19	0.45	0.16	0.27	Note 47
	Vol/NH3	Poultry	YES	0.4	4.3	NON	100.00	WWH	1.000	NO	8.5	Poultry	0.67						0.2	0.05	0.0125	0.05	0.0100	Note 48
	N leach	Liquid	0.867	1.000	ORG	1.00	1.000		0.653	0.0	8.5	Meat	4					1.8	Liquid	0.0	0.21	0.0010	0.06	0.0050
Year 3	N	41	1	2.0	1.9	0	100	11	0	0	1.5	42	0.5	0.3	0.0	0.0	0.0	0.0	0.2	0.02	0.05	0.02	0.03	Note 47
	Vol/NH3	Poultry	YES	0.0	0.5	NON	100.00	WWH	1.000	NO	1.0	Poultry	0.67						0.0	0.01	0.0125	0.01	0.0100	Note 48
	N leach	Liquid	0.867	1.000	ORG	1.00	1.000		0.653	0.0	1.0	Meat	4					0.2	Liquid	0.0	0.02	0.0010	0.01	0.0050
Year 4	N	41	1	0.2	0.2	0	100	1	0	0	0.2	42	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.01	0.00	0.00	Note 47
	Vol/NH3	Poultry	YES	0.0	0.1	NON	100.00	SBA	1.000	NO	0.1	Poultry	0.65						0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.867	1.000	ORG	1.00	1.000		0.653	0.0	0.1	Meat	4					0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050
Year 5	N	41	1	0.0	0.0	0	100	10	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Poultry	0.66						0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.867	1.000	ORG	1.00	1.000		0.653	0.0	0.0	Meat	4					0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050
Year 6	N	41	1	0.0	0.0	0	100	229	1	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	WRB	1.000	NO	0.0	Poultry	0.84						0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.867	1.000	ORG	1.00	1.000		0.653	0.0	0.0	Meat	4					0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050
Year 7	N	41	1	0.0	0.0	0	100	11	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Poultry	0.67						0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.867	1.000	ORG	1.00	1.000		0.653	0.0	0.0	Meat	4					0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050
Year 8	N	41	1	0.0	0.0	0	100	11	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Poultry	0.67						0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.867	1.000	ORG	1.00	1.000		0.653	0.0	0.0	Meat	4					0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050
Year 9	N	41	1	0.0	0.0	0	100	1	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	SBA	1.000	NO	0.0	Poultry	0.65						0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.867	1.000	ORG	1.00	1.000		0.653	0.0	0.0	Meat	4					0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050
Year 10	N	41	1	0.0	0.0	0	100	10	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Poultry	0.66						0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Liquid	0.867	1.000	ORG	1.00	1.000		0.653	0.0	0.0	Meat	4					0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050

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

Note 50

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:

Value

0.0000

0.00

1.00

Kind of source

Total IPCC and non IPCC N2O

3.37

3.37

4.17

Note 51

1.99

1.99

2.79

Note 51

N CHAIN STARTING WITH N FERTILIZER

AND CONTINUING WITH SEPARATED POULTRY MANURE

TO PRODUCE Cereal benefit 1/0

TO PRODUCE Straw used 1/0

WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR

POULTRY MEAT

POULTRY MEAT

Year

Fertilizer/manure #

Store 1/0

Store Amounts

Field 1/0

Or-ganic 1/0

Nhorm propor tion, %

Crop #

Crop use & leach

Fodder: #

Use Name

Fed

N crop #71/

Food #72

Fuel/ bev #8

other #9

Manure handling N a-

Final N a-

N2O-N emission IPCC 1996

N2O-N emission IPCC 2006

Total

Each

Total

Each

Total

Each

Total

Total 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 FIRST YEAR				IPCC 1996				IPCC 2006				TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3										22.2	
					0.0757				0.0423				TOTAL N AMOUNTS IN KG AND % LEACHED										13.3	
	TOTAL				0.0854				0.0483				TOTAL N AMOUNTS IN KG AND %										64.5	

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

0.1539

0.0869

Note 46

Year 1	N	1	1	100.0	100.0	0	100	229	1	0	97.8	42	40.0	20.4	0.0	0.0	0.0	0.0	19.6	1.51	3.03	1.19	1.69 Note 47
	Vol/NH3	N	YES	0.0	2.2	NON	100.00	WRB	1.000	NO	57.8 Poultry		0.84						4.9	0.07	0.0125	0.07	0.0100 Note 48
	N leach		1.022	1.000	ORG	1.00	1.000		0.591	0.0	57.8 Meat		4				10.9 Sep	0.0	1.45	0.0105	0.43	0.0050 Note 49	
Year 2	N	42	1	14.7	12.5	0	100	11	0	0	9.4	42	3.2	1.7	0.0	0.0	0.0	0.0	1.6	0.15	0.36	0.12	0.22 Note 47
	Vol/NH3	Poultry	YES	2.2	3.1	NON	100.00	WWH	1.000	NO	6.1 Poultry		0.67						0.4	0.06	0.0125	0.06	0.0100 Note 48
	N leach	Sep	0.867	1.000	ORG	1.00	1.000		0.653	0.0	6.1 Meat		4				1.3 Sep	0.0	0.15	0.0105	0.05	0.0050 Note 49	
Year 3	N	42	1	1.2	1.0	0	100	11	0	0	0.8	42	0.3	0.1	0.0	0.0	0.0	0.1	0.01	0.03	0.01	0.02 Note 47	
	Vol/NH3	Poultry	YES	0.2	0.3	NON	100.00	WWH	1.000	NO	0.5 Poultry		0.67					0.0	0.00	0.0125	0.00	0.0100 Note 48	
	N leach	Sep	0.867	1.000	ORG	1.00	1.000		0.653	0.0	0.5 Meat		4				0.1 Sep	0.0	0.01	0.0105	0.00	0.0050 Note 49	
Year 4	N	42	1	0.1	0.1	0	100	1	0	0	0.1	42	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0125	0.00	0.0100 Note 48
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	SBA	1.000	NO	0.0 Poultry		0.65					0.0	0.00	0.0125	0.00	0.0050 Note 49	
	N leach	Sep	0.867	1.000	ORG	1.00	1.000		0.653	0.0	0.0 Meat		4				0.0 Sep	0.0	0.00	0.0105	0.00	0.0050 Note 49	
Year 5	N	42	1	0.0	0.0	0	100	10	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00 Note 47
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0 Poultry		0.66					0.0	0.00	0.0125	0.00	0.0100 Note 48	
	N leach	Sep	0.867	1.000	ORG	1.00	1.000		0.653	0.0	0.0 Meat		4				0.0 Sep	0.0	0.00	0.0105	0.00	0.0050 Note 49	
Year 6	N	42	1	0.0	0.0	0	100	229	1	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00 Note 47
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	WRB	1.000	NO	0.0 Poultry		0.84					0.0	0.00	0.0125	0.00	0.0100 Note 48	
	N leach	Sep	0.867	1.000	ORG	1.00	1.000		0.653	0.0	0.0 Meat		4				0.0 Sep	0.0	0.00	0.0105	0.00	0.0050 Note 49	
Year 7	N	42	1	0.0	0.0	0	100	11	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00 Note 47
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0 Poultry		0.67					0.0	0.00	0.0125	0.00	0.0100 Note 48	
	N leach	Sep	0.867	1.000	ORG	1.00	1.000		0.653	0.0	0.0 Meat		4				0.0 Sep	0.0	0.00	0.0105	0.00	0.0050 Note 49	
Year 8	N	42	1	0.0	0.0	0	100	11	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00 Note 47
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0 Poultry		0.67					0.0	0.00	0.0125	0.00	0.0100 Note 48	
	N leach	Sep	0.867	1.000	ORG	1.00	1.000		0.653	0.0	0.0 Meat		4				0.0 Sep	0.0	0.00	0.0105	0.00	0.0050 Note 49	
Year 9	N	42	1	0.0	0.0	0	100	1	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00 Note 47
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	SBA	1.000	NO	0.0 Poultry		0.65					0.0	0.00	0.0125	0.00	0.0100 Note 48	
	N leach	Sep	0.867	1.000	ORG	1.00	1.000		0.653	0.0	0.0 Meat		4				0.0 Sep	0.0	0.00	0.0105	0.00	0.0050 Note 49	
Year 10	N	42	1	0.0	0.0	0	100	10	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00 Note 47
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0 Poultry		0.66					0.0	0.00	0.0125	0.00	0.0100 Note 48	
	N leach	Sep	0.867	1.000	ORG	1.00	1.000		0.653	0.0	0.0 Meat		4				0.0 Sep	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

0.07

0.01

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.77

1.11

Note 50

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:

Value

0.0000

0.00

1.00

Kind of source

Total IPCC and non IPCC N2O

3.42

3.42

4.18

Note 51

1.93

1.93

2.70

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

Year

Fertilizer/manure
#

Store
1/0

Amounts
Store

Field
1/0

Or-
ganic
1/0

Nnorm
proportion, %

Crop
#

Crop
leach

Straw
used
1/0

Fodder:
Uses #21-61
Fed

N crop
#71/
#72

Food
#8

Fuel/
bev
#9

Manure
handling
#

Final
N a-
mounts

N2O-N emission
IPCC 1996

N2O-N emission
Each

Total

N2O-N emission
Total

Note 43
Note 43

Note 44
Note 44

Note 44
Note 44

Total Year 1-10	N NH3 N leach	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 %																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							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2006																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				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YEAR										0.0785										0.0427																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
		TOTAL										0.0864										0.0474																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

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

0.1620

0.0888

Note 46

Year 1	N	1	1	100.0	100.0	0	100	229	1	0	97.8	42	40.0	20.4	0.0	0.0	0.0	0.0	43	19.6	1.59	3.14	1.17	1.71	Note 47
	Vol/NH3	N	YES	0.0	2.2	NON	100.00	WRB	1.000	NO	57.8	Poultry	0.84	7.8					0.0 Poultry	7.8	0.10	0.0125	0.10	0.0100	Note 48
	N leach		1.022	1.000		ORG	1.00	1.000	0.591	0.0	57.8	Meat	4					10.9	Deep	0.0	1.45	0.0200	0.43	0.0050	Note 49
Year 2	N	43	1	11.9	9.8	0	100	11	0	0	7.4	42	1.8	0.9	0.0	0.0	0.0	0.0	43	0.9	0.12	0.30	0.09	0.18	Note 47
	Vol/NH3	Poultry	YES	2.1	2.5	NON	100.00	WWH	1.000	NO	5.6	Poultry	0.67						0.0 Poultry	0.3	0.05	0.0125	0.05	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.760	0.0	5.6	Meat	4					1.0	Deep	0.0	0.14	0.0200	0.04	0.0050	Note 49
Year 3	N	43	1	0.5	0.4	0	100	11	0	0	0.3	42	0.1	0.0	0.0	0.0	0.0	0.0	43	0.0	0.01	0.01	0.00	0.01	Note 47
	Vol/NH3	Poultry	YES	0.1	0.1	NON	100.00	WWH	1.000	NO	0.2	Poultry	0.67						0.0 Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.760	0.0	0.2	Meat	4					0.0	Deep	0.0	0.01	0.0200	0.00	0.0050	Note 49
Year 4	N	43	1	0.0	0.0	0	100	1	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.0050	Note 47
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	SBA	1.000	NO	0.0	Poultry	0.65						0.0 Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.760	0.0	0.0	Meat	4					0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year 5	N	43	1	0.0	0.0	0	100	10	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.0050	Note 47
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Poultry	0.66						0.0 Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.760	0.0	0.0	Meat	4					0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year 6	N	43	1	0.0	0.0	0	100	229	1	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.0050	Note 47
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	WRB	1.000	NO	0.0	Poultry	0.84						0.0 Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.760	0.0	0.0	Meat	4					0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year 7	N	43	1	0.0	0.0	0	100	11	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.0050	Note 47
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Poultry	0.67						0.0 Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.760	0.0	0.0	Meat	4					0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year 8	N	43	1	0.0	0.0	0	100	11	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.0050	Note 47
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Poultry	0.67						0.0 Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.760	0.0	0.0	Meat	4					0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year 9	N	43	1	0.0	0.0	0	100	1	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.0050	Note 47
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	SBA	1.000	NO	0.0	Poultry	0.65						0.0 Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.760	0.0	0.0	Meat	4					0.0	Deep	0.0	0.00	0.0200	0.00	0.0050	Note 49
Year 10	N	43	1	0.0	0.0	0	100	10	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	0.0	43	0.0	0.00	0.00	0.00	0.0050	Note 47
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Poultry	0.66						0.0 Poultry	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Deep	0.600	1.013		ORG	1.00	1.000	0.760	0.0	0.0	Meat	4					0.0	Deep	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

0.04

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.73

1.06

Note 50

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:

Value

0.0000

0.00

1.00

Kind of source

Total IPCC and non IPCC N2O

3.46

3.46

4.19

Note 51

1.90

1.90

2.63

Note 51

Note 51

N CHAIN STARTING WITH N FERTILIZER N CHAIN STARTING WITH N FERTILIZER TO PRODUCE TO PRODUCE WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR POULTRY MEAT POULTRY MEAT AND CONTINUING WITH MANURE FROM SCRAPING POULTRY TO PRODUCE TO PRODUCE WINTER WHEAT FOR POULTRY MEAT POULTRY MEAT

Year Fertilizer/manure # Store Amounts Store 1/0 Field 1/0 Or-ganic 1/0 Nnorm propor tion, % Crop use & leach Straw used 1/0 Cereal benefit 1/0 Fodder: Uses #21-61 Fed #72 N crop Food/ bev #71/ #8 Fuel/ other #9 Manure Final handling N a- # Name mounts N2O-N emission IPCC 1996 N2O-N emission IPCC 2006 Total Total Note 43 Note 43 Note 44 Note 44 Note 44

Total N	RATIO OF N2O-N TO N IN FIRST CROP				TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED				22.4	22.4
Year N NH3	ACCORDING TO IPCC 1996				IPCC 2006				3.7	3.7
1-10 N leach	FIRST YEAR				0.0804				73.9	73.9
	TOTAL				0.0989				100.0	100.0
					0.0490				73.9	73.9
					0.0592				100.0	100.0
					TOTAL N AMOUNTS IN KG AND %					

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

Year 1	N	N	1	1	100.0	100.0	0	100	229	1	0	97.8	42	40.0	20.4	0.0	0.0	0.0	44	19.6	1.75	3.22	1.51	1.96
	Vol/NH3	N	YES		0.0	2.2	NON	100.00	WRB	1.000	NO	57.8	Poultry	0.84				0.0	Poultry	0.0	0.02	0.0125	0.02	0.0100
	N leach		1.022		1.000	ORG	1.00	1.000		0.591	0.0	57.8	Meat	4				10.9	Scrap	0.0	1.45	0.43	0.0200	
Year 2	N	N	44	1	19.6	19.6	0	100	11	0	0	18.2	42	3.5	1.8	0.0	0.0	0.0	44	1.7	0.29	0.67	0.25	0.37
	Vol/NH3	Poultry	YES		0.0	1.4	NON	100.00	WWH	1.000	NO	14.7	Poultry	0.67				0.0	Poultry	0.0	0.01	0.0125	0.01	0.0100
	N leach	Scrap	0.484		1.000	ORG	1.00	1.000		0.806	0.0	14.7	Meat	4				2.5	Scrap	0.0	0.37	0.11	0.0200	
Year 3	N	N	44	1	1.7	1.7	0	100	11	0	0	1.6	42	0.3	0.2	0.0	0.0	0.0	44	0.2	0.03	0.06	0.02	0.03
	Vol/NH3	Poultry	YES		0.0	0.1	NON	100.00	WWH	1.000	NO	1.3	Poultry	0.67				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100
	N leach	Scrap	0.484		1.000	ORG	1.00	1.000		0.806	0.0	1.3	Meat	4				0.2	Scrap	0.0	0.03	0.01	0.0200	
Year 4	N	N	44	1	0.2	0.2	0	100	1	0	0	0.1	42	0.0	0.0	0.0	0.0	0.0	44	0.0	0.00	0.01	0.00	0.00
	Vol/NH3	Poultry	YES		0.0	0.0	NON	100.00	SBA	1.000	NO	0.1	Poultry	0.65				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100
	N leach	Scrap	0.484		1.000	ORG	1.00	1.000		0.806	0.0	0.1	Meat	4				0.0	Scrap	0.0	0.00	0.0200	0.00	0.0200
Year 5	N	N	44	1	0.0	0.0	0	100	10	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	44	0.0	0.00	0.00	0.00	0.00
	Vol/NH3	Poultry	YES		0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Poultry	0.66				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100
	N leach	Scrap	0.484		1.000	ORG	1.00	1.000		0.806	0.0	0.0	Meat	4				0.0	Scrap	0.0	0.00	0.0200	0.00	0.0200
Year 6	N	N	44	1	0.0	0.0	0	100	229	1	0	0.0	42	0.0	0.0	0.0	0.0	0.0	44	0.0	0.00	0.00	0.00	0.00
	Vol/NH3	Poultry	YES		0.0	0.0	NON	100.00	WRB	1.000	NO	0.0	Poultry	0.84				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100
	N leach	Scrap	0.484		1.000	ORG	1.00	1.000		0.806	0.0	0.0	Meat	4				0.0	Scrap	0.0	0.00	0.0200	0.00	0.0200
Year 7	N	N	44	1	0.0	0.0	0	100	11	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	44	0.0	0.00	0.00	0.00	0.00
	Vol/NH3	Poultry	YES		0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Poultry	0.67				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100
	N leach	Scrap	0.484		1.000	ORG	1.00	1.000		0.806	0.0	0.0	Meat	4				0.0	Scrap	0.0	0.00	0.0200	0.00	0.0200
Year 8	N	N	44	1	0.0	0.0	0	100	11	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	44	0.0	0.00	0.00	0.00	0.00
	Vol/NH3	Poultry	YES		0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Poultry	0.67				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100
	N leach	Scrap	0.484		1.000	ORG	1.00	1.000		0.806	0.0	0.0	Meat	4				0.0	Scrap	0.0	0.00	0.0200	0.00	0.0200
Year 9	N	N	44	1	0.0	0.0	0	100	1	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	44	0.0	0.00	0.00	0.00	0.00
	Vol/NH3	Poultry	YES		0.0	0.0	NON	100.00	SBA	1.000	NO	0.0	Poultry	0.65				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100
	N leach	Scrap	0.484		1.000	ORG	1.00	1.000		0.806	0.0	0.0	Meat	4				0.0	Scrap	0.0	0.00	0.0200	0.00	0.0200
Year 10	N	N	44	1	0.0	0.0	0	100	10	0	0	0.0	42	0.0	0.0	0.0	0.0	0.0	44	0.0	0.00	0.00	0.00	0.00
	Vol/NH3	Poultry	YES		0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Poultry	0.66				0.0	Poultry	0.0	0.00	0.0125	0.00	0.0100
	N leach	Scrap	0.484		1.000	ORG	1.00	1.000		0.806	0.0	0.0	Meat	4				0.0	Scrap	0.0	0.00	0.0200	0.00	0.0200

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 0.06 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.76 1.09 Note 50

Possible additional non IPCC N2O-N emissions Value Kind of source Total IPCC and non IPCC N2O Note 51
N residues emissions, ratio of N2O-N to N: 0.0000 0.00 Current crops 3.96 2.37 Note 51
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 Total anthropogenic 3.96 2.37 Note 51
Natural background emissions, kg N2O-N/ha: 1.00 0.69 0.06 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.76 Total including natural 4.72 3.13 Note 51

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

Year Fertilizer/manure # Store Amounts Store 1/0 Field 1/0 Or-ganic 1/0 Nnorm propor tion, % Crop # Crop use & leach Straw used 1/0 Cereal benefit 1/0 Fuel/ other #9 N crop #71/ #72 Food #8 Manure handling N a- # Name mounts Final N2O-N emission IPCC 1996 IPCC 2006 N2O-N emission IPCC 2006
Note 43 Note 43 Note 44 Note 44 Note 44

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	1-10	N leach	1-10	N leach	1-10	N leach	1-10	N leach	1-10	IPCC 1996	IPCC 2006	0.0785	0.0440	0.0947	0.0539	TOTAL N AMOUNTS IN KG AND %	11.0	11.0
TOTAL																				

N2O-N/N in food/beverage/fuel/other 0.3435 0.1956 Note 46

Year 1	N	1	1	100.0	100.0	0	100	229	1	0	97.8	43	40.0	9.6	0.0	0.0	0.0	0.0	0.0	42	30.4	1.60	3.14	1.23	1.76
	Vol/NH3	N	YES	0.0	2.2	NON	100.00	WRB	1.000	NO	57.8	Poultry	0.84							0.0	Poultry	7.6	0.10	0.0100	Note 48
	N leach		1.022	1.000	ORG	1.00	1.000		0.591	0.0	57.8	Eggs	4						10.9	Sep	0.0	1.45	0.0105	Note 49	
Year 2	N	42	1	22.8	19.4	0	100	11	0	0	14.5	43	5.0	1.2	0.0	0.0	0.0	0.0	0.0	42	3.8	0.24	0.57	0.18	0.35
	Vol/NH3	Poultry	YES	3.4	4.8	NON	100.00	WWH	1.000	NO	9.5	Poultry	0.67							0.0	Poultry	1.0	0.09	0.0125	Note 47
	N leach	Sep	0.867	1.000	ORG	1.00	1.000		0.653	0.0	9.5	Eggs	4						2.0	Sep	0.0	0.24	0.0105	Note 48	
Year 3	N	42	1	2.9	2.4	0	100	11	0	0	1.8	43	0.6	0.2	0.0	0.0	0.0	0.0	0.0	42	0.5	0.03	0.07	0.02	0.04
	Vol/NH3	Poultry	YES	0.4	0.6	NON	100.00	WWH	1.000	NO	1.2	Poultry	0.67							0.0	Poultry	0.1	0.01	0.0125	Note 48
	N leach	Sep	0.867	1.000	ORG	1.00	1.000		0.653	0.0	1.2	Eggs	4						0.2	Sep	0.0	0.03	0.0105	Note 49	
Year 4	N	42	1	0.4	0.3	0	100	1	0	0	0.2	43	0.1	0.0	0.0	0.0	0.0	0.0	0.0	42	0.1	0.00	0.01	0.00	0.01
	Vol/NH3	Poultry	YES	0.1	0.1	NON	100.00	SBA	1.000	NO	0.2	Poultry	0.65							0.0	Poultry	0.0	0.00	0.0125	Note 48
	N leach	Sep	0.867	1.000	ORG	1.00	1.000		0.653	0.0	0.2	Eggs	4						0.0	Sep	0.0	0.00	0.0105	Note 49	
Year 5	N	42	1	0.0	0.0	0	100	10	0	0	0.0	43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42	0.0	0.00	0.00	0.00	0.00
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Poultry	0.66							0.0	Poultry	0.0	0.00	0.0125	Note 48
	N leach	Sep	0.867	1.000	ORG	1.00	1.000		0.653	0.0	0.0	Eggs	4						0.0	Sep	0.0	0.00	0.0105	Note 49	
Year 6	N	42	1	0.0	0.0	0	100	229	1	0	0.0	43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42	0.0	0.00	0.00	0.00	0.00
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	WRB	1.000	NO	0.0	Poultry	0.84							0.0	Poultry	0.0	0.00	0.0125	Note 48
	N leach	Sep	0.867	1.000	ORG	1.00	1.000		0.653	0.0	0.0	Eggs	4						0.0	Sep	0.0	0.00	0.0105	Note 49	
Year 7	N	42	1	0.0	0.0	0	100	11	0	0	0.0	43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42	0.0	0.00	0.00	0.00	0.00
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Poultry	0.67							0.0	Poultry	0.0	0.00	0.0125	Note 48
	N leach	Sep	0.867	1.000	ORG	1.00	1.000		0.653	0.0	0.0	Eggs	4						0.0	Sep	0.0	0.00	0.0105	Note 49	
Year 8	N	42	1	0.0	0.0	0	100	11	0	0	0.0	43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42	0.0	0.00	0.00	0.00	0.00
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Poultry	0.67							0.0	Poultry	0.0	0.00	0.0125	Note 48
	N leach	Sep	0.867	1.000	ORG	1.00	1.000		0.653	0.0	0.0	Eggs	4						0.0	Sep	0.0	0.00	0.0105	Note 49	
Year 9	N	42	1	0.0	0.0	0	100	1	0	0	0.0	43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42	0.0	0.00	0.00	0.00	0.00
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	SBA	1.000	NO	0.0	Poultry	0.65							0.0	Poultry	0.0	0.00	0.0125	Note 48
	N leach	Sep	0.867	1.000	ORG	1.00	1.000		0.653	0.0	0.0	Eggs	4						0.0	Sep	0.0	0.00	0.0105	Note 49	
Year 10	N	42	1	0.0	0.0	0	100	10	0	0	0.0	43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42	0.0	0.00	0.00	0.00	0.00
	Vol/NH3	Poultry	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Poultry	0.66							0.0	Poultry	0.0	0.00	0.0125	Note 48
	N leach	Sep	0.867	1.000	ORG	1.00	1.000		0.653	0.0	0.0	Eggs	4						0.0	Sep	0.0	0.00	0.0105	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 0.10 0.01 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 3.79
2.16 Note 51
2.16 Note 51
2.97 Note 51

N CHAIN STARTING WITH N FERTILIZER TO PRODUCE TO PRODUCE WINTER RAPESEED FOR PPO/BIODIESEL AND FUEL/ N2O-N emission
AND CONTINUING WITH POULTRY DEEP LITTER TO PRODUCE WINTER WHEAT FOR POULTRY EGGS IPCC 1996 IPCC 2006

Year Fertilizer/manure Or- Nnorm Crop Straw Crop Use Fodder: N crop Food/ Fuel/ N2O-N emission
Store Amounts ganic propor # benefit used use & # #71/ bev other IPCC 1996
Name 1/0 Store Field 1/0 1/0 1/0 leach leach # Name Fed #72 #8 #9 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									
	IPCC 1996					IPCC 2006					TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3									
	FIRST YEAR					TOTAL N AMOUNTS IN KG AND % LEACHED					TOTAL N AMOUNTS IN KG AND % LEACHED									
	TOTAL					TOTAL N AMOUNTS IN KG AND %					TOTAL N AMOUNTS IN KG AND %									

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

Year 1	N	1	1	100.0	100.0	0	100	229	1	0	97.8	43	40.0	9.6	0.0	0.0	0.0	0.0	30.4	1.21	3.31	1.72	3.31	1.21	1.78 Note 47
	Vol/NH3	N	YES	0.0	2.2 NON	100.00	WRB	1.000	NO	57.8 Poultry	57.8 Poultry	0.84						12.1	0.14	0.0125	0.14	0.0125	0.14	0.0100 Note 48	
	N leach		1.022	1.000	ORG	1.00	1.000	0.591	0.0	57.8 Eggs	10.9 Deep	4						0.0	0.43	0.0200	0.43	0.0200	0.43	0.0050 Note 49	
Year 2	N	43	1	18.5	15.2	0	100	11	0	0	11.4	43	2.7	0.7	0.0	0.0	0.0	0.0	2.1	0.19	0.48	0.19	0.48	0.14	0.28 Note 47
	Vol/NH3	Poultry	YES	3.2	3.8 NON	100.00	WWH	1.000	NO	8.7 Poultry	0.0 Poultry	0.67						0.8	0.08	0.0125	0.08	0.0125	0.08	0.0100 Note 48	
	N leach	Deep	0.600	1.013	ORG	1.00	1.000	0.760	0.0	8.7 Eggs	1.6 Deep	4						0.0	0.22	0.0200	0.07	0.0200	0.07	0.0050 Note 49	
Year 3	N	43	1	1.3	1.0	0	100	11	0	0	0.8	43	0.2	0.0	0.0	0.0	0.0	0.1	0.01	0.03	0.01	0.03	0.01	0.02 Note 47	
	Vol/NH3	Poultry	YES	0.2	0.3 NON	100.00	WWH	1.000	NO	0.6 Poultry	0.0 Poultry	0.67						0.1	0.01	0.0125	0.01	0.0125	0.01	0.0100 Note 48	
	N leach	Deep	0.600	1.013	ORG	1.00	1.000	0.760	0.0	0.6 Eggs	0.1 Deep	4						0.0	0.01	0.0200	0.00	0.0200	0.00	0.0050 Note 49	
Year 4	N	43	1	0.1	0.1	0	100	1	0	0	0.1	43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00 Note 47	
	Vol/NH3	Poultry	YES	0.0	0.0 NON	100.00	SBA	1.000	NO	0.0 Poultry	0.0 Poultry	0.65						0.0	0.00	0.0125	0.00	0.0125	0.00	0.0100 Note 48	
	N leach	Deep	0.600	1.013	ORG	1.00	1.000	0.760	0.0	0.0 Eggs	0.0 Deep	4						0.0	0.00	0.0200	0.00	0.0200	0.00	0.0050 Note 49	
Year 5	N	43	1	0.0	0.0	0	100	10	0	0	0.0	43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00 Note 47	
	Vol/NH3	Poultry	YES	0.0	0.0 NON	100.00	WBA	1.000	NO	0.0 Poultry	0.0 Poultry	0.66						0.0	0.00	0.0125	0.00	0.0125	0.00	0.0100 Note 48	
	N leach	Deep	0.600	1.013	ORG	1.00	1.000	0.760	0.0	0.0 Eggs	0.0 Deep	4						0.0	0.00	0.0200	0.00	0.0200	0.00	0.0050 Note 49	
Year 6	N	43	1	0.0	0.0	0	100	229	1	0	0.0	43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00 Note 47	
	Vol/NH3	Poultry	YES	0.0	0.0 NON	100.00	WRB	1.000	NO	0.0 Poultry	0.0 Poultry	0.84						0.0	0.00	0.0125	0.00	0.0125	0.00	0.0100 Note 48	
	N leach	Deep	0.600	1.013	ORG	1.00	1.000	0.760	0.0	0.0 Eggs	0.0 Deep	4						0.0	0.00	0.0200	0.00	0.0200	0.00	0.0050 Note 49	
Year 7	N	43	1	0.0	0.0	0	100	11	0	0	0.0	43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00 Note 47	
	Vol/NH3	Poultry	YES	0.0	0.0 NON	100.00	WWH	1.000	NO	0.0 Poultry	0.0 Poultry	0.67						0.0	0.00	0.0125	0.00	0.0125	0.00	0.0100 Note 48	
	N leach	Deep	0.600	1.013	ORG	1.00	1.000	0.760	0.0	0.0 Eggs	0.0 Deep	4						0.0	0.00	0.0200	0.00	0.0200	0.00	0.0050 Note 49	
Year 8	N	43	1	0.0	0.0	0	100	11	0	0	0.0	43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00 Note 47	
	Vol/NH3	Poultry	YES	0.0	0.0 NON	100.00	WWH	1.000	NO	0.0 Poultry	0.0 Poultry	0.67						0.0	0.00	0.0125	0.00	0.0125	0.00	0.0100 Note 48	
	N leach	Deep	0.600	1.013	ORG	1.00	1.000	0.760	0.0	0.0 Eggs	0.0 Deep	4						0.0	0.00	0.0200	0.00	0.0200	0.00	0.0050 Note 49	
Year 9	N	43	1	0.0	0.0	0	100	1	0	0	0.0	43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00 Note 47	
	Vol/NH3	Poultry	YES	0.0	0.0 NON	100.00	SBA	1.000	NO	0.0 Poultry	0.0 Poultry	0.65						0.0	0.00	0.0125	0.00	0.0125	0.00	0.0100 Note 48	
	N leach	Deep	0.600	1.013	ORG	1.00	1.000	0.760	0.0	0.0 Eggs	0.0 Deep	4						0.0	0.00	0.0200	0.00	0.0200	0.00	0.0050 Note 49	
Year 10	N	43	1	0.0	0.0	0	100	10	0	0	0.0	43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00 Note 47	
	Vol/NH3	Poultry	YES	0.0	0.0 NON	100.00	WBA	1.000	NO	0.0 Poultry	0.0 Poultry	0.66						0.0	0.00	0.0125	0.00	0.0125	0.00	0.0100 Note 48	
	N leach	Deep	0.600	1.013	ORG	1.00	1.000	0.760	0.0	0.0 Eggs	0.0 Deep	4						0.0	0.00	0.0200	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 0.06 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.75 1.09 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
Kind of source
Total IPCC and non IPCC N2O
2.09 Note 51
2.09 Note 51
2.84 Note 51

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

Year

Fertilizer/manure
#

Store
1/0

Amounts
Store

Field
1/0

Or-
ganic

Nhorm
proportion, %

Crop
#

Straw
used

Cereal
benefit

1/0

1/0

1/0

leach

Crop
use &

Use
#

Fodder:
Uses #21-61

Fed

Food

#72

#71/
bev

N crop
#8

Fuel/
other

Fuel/
#9

Manure
handling

Final
N a-

N2O-N emission
IPCC 1996

N2O-N emission
IPCC 2006

Total
Each

Total
Each

Note 44
Note 44
Note 44
Note 44

Total Year 1-10	N NH3 N leach	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					TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3									
		FIRST YEAR					0.0878					0.0392					TOTAL N AMOUNTS IN KG AND % LEACHED									
		TOTAL					0.1241					0.0567					TOTAL N AMOUNTS IN KG AND %									

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

0.7388

0.3377

Note 46

Year	N	1	1	100.0	100.0	0	100	229	1	0	97.8	51	40.0	5.7	0.0	0.0	0.0	0.0	0.0	34.3	2.05	3.51	1.11	1.57	Note 47		
1	Vol/NH3	N	YES	0.0	2.2	NON	100.00	WRB	1.000	NO	57.8	Sheep	0.84							0.0	0.02	0.0125	0.02	0.0100	Note 48		
	N leach		1.022	1.000	ORG	1.00	1.000		0.591	0.0	57.8	Milk/multi	5						10.9	Graz	0.0	1.45	0.0200	0.43	0.0000	Note 49	
Year	N	54	1	34.3	34.3	0	100	11	0	0	31.9	51	6.2	0.9	0.0	0.0	0.0	0.0	0.0	5.3	0.56	1.23	0.37	0.59	Note 47		
2	Vol/NH3	Sheep	YES	0.0	2.4	NON	100.00	WWH	1.000	NO	25.7	Sheep	0.67							0.0	0.02	0.0125	0.02	0.0100	Note 48		
	N leach	Graz	0.484	1.000	ORG	1.00	1.000		0.806	0.0	25.7	Milk/multi	5							4.3	Graz	0.0	0.64	0.0200	0.19	0.0000	Note 49
Year	N	54	1	5.3	5.3	0	100	11	0	0	4.9	51	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.8	0.09	0.19	0.06	0.09	Note 47		
3	Vol/NH3	Sheep	YES	0.0	0.4	NON	100.00	WWH	1.000	NO	4.0	Sheep	0.67							0.0	0.00	0.0125	0.00	0.0100	Note 48		
	N leach	Graz	0.484	1.000	ORG	1.00	1.000		0.806	0.0	4.0	Milk/multi	5							0.7	Graz	0.0	0.10	0.0200	0.03	0.0000	Note 49
Year	N	54	1	0.8	0.8	0	100	1	0	0	0.8	51	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.01	0.03	0.01	0.01	Note 47			
4	Vol/NH3	Sheep	YES	0.0	0.1	NON	100.00	SBA	1.000	NO	0.6	Sheep	0.65							0.0	0.00	0.0125	0.00	0.0100	Note 48		
	N leach	Graz	0.484	1.000	ORG	1.00	1.000		0.806	0.0	0.6	Milk/multi	5						0.1	Graz	0.0	0.02	0.0200	0.00	0.0000	Note 49	
Year	N	54	1	0.1	0.1	0	100	10	0	0	0.1	51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47		
5	Vol/NH3	Sheep	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.1	Sheep	0.66							0.0	0.00	0.0125	0.00	0.0100	Note 48		
	N leach	Graz	0.484	1.000	ORG	1.00	1.000		0.806	0.0	0.1	Milk/multi	5						0.0	Graz	0.0	0.00	0.0200	0.00	0.0000	Note 49	
Year	N	54	1	0.0	0.0	0	100	229	1	0	0.0	51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47		
6	Vol/NH3	Sheep	YES	0.0	0.0	NON	100.00	WRB	1.000	NO	0.0	Sheep	0.84							0.0	0.00	0.0125	0.00	0.0100	Note 48		
	N leach	Graz	0.484	1.000	ORG	1.00	1.000		0.806	0.0	0.0	Milk/multi	5						0.0	Graz	0.0	0.00	0.0200	0.00	0.0000	Note 49	
Year	N	54	1	0.0	0.0	0	100	11	0	0	0.0	51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47		
7	Vol/NH3	Sheep	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Sheep	0.67							0.0	0.00	0.0125	0.00	0.0100	Note 48		
	N leach	Graz	0.484	1.000	ORG	1.00	1.000		0.806	0.0	0.0	Milk/multi	5						0.0	Graz	0.0	0.00	0.0200	0.00	0.0000	Note 49	
Year	N	54	1	0.0	0.0	0	100	11	0	0	0.0	51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47		
8	Vol/NH3	Sheep	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Sheep	0.67							0.0	0.00	0.0125	0.00	0.0100	Note 48		
	N leach	Graz	0.484	1.000	ORG	1.00	1.000		0.806	0.0	0.0	Milk/multi	5						0.0	Graz	0.0	0.00	0.0200	0.00	0.0000	Note 49	
Year	N	54	1	0.0	0.0	0	100	1	0	0	0.0	51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47		
9	Vol/NH3	Sheep	YES	0.0	0.0	NON	100.00	SBA	1.000	NO	0.0	Sheep	0.65							0.0	0.00	0.0125	0.00	0.0100	Note 48		
	N leach	Graz	0.484	1.000	ORG	1.00	1.000		0.806	0.0	0.0	Milk/multi	5						0.0	Graz	0.0	0.00	0.0200	0.00	0.0000	Note 49	
Year	N	54	1	0.0	0.0	0	100	10	0	0	0.0	51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47		
10	Vol/NH3	Sheep	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Sheep	0.66							0.0	0.00	0.0125	0.00	0.0100	Note 48		
	N leach	Graz	0.484	1.000	ORG	1.00	1.000		0.806	0.0	0.0	Milk/multi	5						0.0	Graz	0.0	0.00	0.0200	0.00	0.0000	Note 49	

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

1.18

Note 50

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:

Value

0.0000

0.00

1.00

Kind of source

Total IPCC and non IPCC N2O

4.96

4.96

5.78

Note 51

2.27

2.27

3.08

Note 51

Note 51

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

Year

Fertilizer/manure
#

Store
1/0

Amounts
Store

Field
1/0

Or-
ganic
1/0

Nnorm
proportion, %

Crop
#

Straw
used
1/0

Crop
leach

Use
#

Fodder:
Uses #21-61
Fed

N crop
#71/
#72

Food
#8

Fuel/
bev
#9

Manure
handling
#

Final
N a-
mounts

N2O-N emission
IPCC 1996

N2O-N emission
Each

Total

Year 44
Note 44

Year 44
Note 44

Year 44
Note 44

Year 44
Note 44

Total N	RATIO OF N2O-N TO N IN FIRST CROP										TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED										4.4	4.2
Year N NH3	ACCORDING TO										TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3										23.5	22.2
1-10 N leach	FIRST YEAR										TOTAL N AMOUNTS IN KG AND % LEACHED										77.8	73.6
	TOTAL										TOTAL N AMOUNTS IN KG AND %										105.8	100.0

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

Year 1	N	1	1	100.0	100.0	0	100	229	1	0	97.8	61	40.0	3.8	0.0	0.0	0.0	0.0	36.2	1.97	3.49	1.27	1.78 Note 47
	Vol/NH3	N	YES	0.0	2.2 NON	100.00	WRB	1.000	NO	57.8 Goat	0.84							0.0 Goat	5.4	0.08	0.0125	0.08	
	N leach		1.022	1.000	ORG	1.00	1.000		0.591	0.0	57.8 Milk/meat	6						10.9 Deep	0.0	1.45	0.0200	0.43	
Year 2	N	63	1	35.7	30.4	0	100	11	0	0	22.8	61	5.5	0.5	0.0	0.0	0.0	0.0	4.9	0.41	0.98	0.29	
	Vol/NH3	Goat	YES	5.4	7.6 NON	100.00	WWH	1.000	NO	17.3 Goat	0.67							0.0 Goat	0.7	0.14	0.0125	0.14	
	N leach	Deep	0.600	1.162	ORG	1.00	1.000		0.760	0.0	17.3 Milk/meat	6						3.1 Deep	0.0	0.43	0.0200	0.13	
Year 3	N	63	1	4.9	4.1	0	100	11	0	0	3.1	61	0.7	0.1	0.0	0.0	0.0	0.0	0.7	0.06	0.13	0.04	
	Vol/NH3	Goat	YES	0.7	1.0 NON	100.00	WWH	1.000	NO	2.4 Goat	0.67							0.0 Goat	0.1	0.02	0.0125	0.02	
	N leach	Deep	0.600	1.162	ORG	1.00	1.000		0.760	0.0	2.4 Milk/meat	6						0.4 Deep	0.0	0.06	0.0200	0.02	
Year 4	N	63	1	0.7	0.6	0	100	1	0	0	0.4	61	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.01	0.02	0.01	
	Vol/NH3	Goat	YES	0.1	0.1 NON	100.00	SBA	1.000	NO	0.3 Goat	0.65							0.0 Goat	0.0	0.00	0.0125	0.00	
	N leach	Deep	0.600	1.162	ORG	1.00	1.000		0.760	0.0	0.3 Milk/meat	6						0.1 Deep	0.0	0.01	0.0200	0.00	
Year 5	N	63	1	0.1	0.1	0	100	10	0	0	0.1	61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
	Vol/NH3	Goat	YES	0.0	0.0 NON	100.00	WBA	1.000	NO	0.0 Goat	0.66							0.0 Goat	0.0	0.00	0.0125	0.00	
	N leach	Deep	0.600	1.162	ORG	1.00	1.000		0.760	0.0	0.0 Milk/meat	6						0.0 Deep	0.0	0.00	0.0200	0.00	
Year 6	N	63	1	0.0	0.0	0	100	229	1	0	0.0	61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
	Vol/NH3	Goat	YES	0.0	0.0 NON	100.00	WRB	1.000	NO	0.0 Goat	0.84							0.0 Goat	0.0	0.00	0.0125	0.00	
	N leach	Deep	0.600	1.162	ORG	1.00	1.000		0.760	0.0	0.0 Milk/meat	6						0.0 Deep	0.0	0.00	0.0200	0.00	
Year 7	N	63	1	0.0	0.0	0	100	11	0	0	0.0	61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
	Vol/NH3	Goat	YES	0.0	0.0 NON	100.00	WWH	1.000	NO	0.0 Goat	0.67							0.0 Goat	0.0	0.00	0.0125	0.00	
	N leach	Deep	0.600	1.162	ORG	1.00	1.000		0.760	0.0	0.0 Milk/meat	6						0.0 Deep	0.0	0.00	0.0200	0.00	
Year 8	N	63	1	0.0	0.0	0	100	11	0	0	0.0	61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
	Vol/NH3	Goat	YES	0.0	0.0 NON	100.00	WWH	1.000	NO	0.0 Goat	0.67							0.0 Goat	0.0	0.00	0.0125	0.00	
	N leach	Deep	0.600	1.162	ORG	1.00	1.000		0.760	0.0	0.0 Milk/meat	6						0.0 Deep	0.0	0.00	0.0200	0.00	
Year 9	N	63	1	0.0	0.0	0	100	1	0	0	0.0	61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
	Vol/NH3	Goat	YES	0.0	0.0 NON	100.00	SBA	1.000	NO	0.0 Goat	0.65							0.0 Goat	0.0	0.00	0.0125	0.00	
	N leach	Deep	0.600	1.162	ORG	1.00	1.000		0.760	0.0	0.0 Milk/meat	6						0.0 Deep	0.0	0.00	0.0200	0.00	
Year 10	N	63	1	0.0	0.0	0	100	10	0	0	0.0	61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
	Vol/NH3	Goat	YES	0.0	0.0 NON	100.00	WBA	1.000	NO	0.0 Goat	0.66							0.0 Goat	0.0	0.00	0.0125	0.00	
	N leach	Deep	0.600	1.162	ORG	1.00	1.000		0.760	0.0	0.0 Milk/meat	6						0.0 Deep	0.0	0.00	0.0200	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

0.11

0.02

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.83

1.19

Note 50

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:

Value

0.0000

0.00

1.00

Kind of source

Total IPCC and non IPCC N2O

4.63

4.63

5.45

Note 51

2.42 Note 51

2.42 Note 51

3.24 Note 51

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

Year

Fertilizer/manure
#

Store
1/0

Amounts
Store

Field
1/0

Or-
ganic
1/0

Nhorm
proportion, %

Crop
#

Straw
used
1/0

Cereal
benefit
1/0

Fodder:
#

Use
Name

Fed
Fed

N crop
#71/
#72

Food
Food

Fuel/
bev
#8

other
#9

Manure
handling

Final
N a-

N2O-N emission
IPCC 1996

N2O-N emission
IPCC 2006

Total
Total

Note 44
Note 44
Note 44

Total Year 1-10	N NH3 N leach	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 %									
		ACCORDING TO										IPCC 2006										IPCC 1996										IPCC 2006										4.6									
		FIRST YEAR										0.0483										0.0887										5.2										5.2									
		TOTAL										0.1275										0.0686										90.2										100.0									

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

1.1120

0.5985

Note 46

Year 1	N	1	1	100.0	100.0	0	100	229	1	0	97.8	61	40.0	3.8	0.0	0.0	0.0	0.0	36.2	2.08	3.55	1.48	1.93	Note 47	
	Vol/NH3	N	YES	0.0	2.2	NON	100.00	WRB	1.000	NO	57.8	Goat	0.84					0.0	Goat	0.0	0.02	0.02	0.0100	Note 48	
	N leach		1.022	1.000	ORG	1.00	1.000		0.591	0.0	57.8	Milk/mea	6					10.9	Graz	0.0	1.45	0.0200	0.43	0.0100	Note 49
Year 2	N	64	1	36.2	36.2	0	100	11	0	0	33.6	61	6.5	0.6	0.0	0.0	0.0	0.0	5.9	0.60	1.30	0.45	0.68	Note 47	
	Vol/NH3	Goat	YES	0.0	2.5	NON	100.00	WWH	1.000	NO	27.1	Goat	0.67					0.0	Goat	0.0	0.03	0.03	0.0100	Note 48	
	N leach	Graz	0.484	1.000	ORG	1.00	1.000		0.806	0.0	27.1	Milk/mea	6					4.6	Graz	0.0	0.68	0.0200	0.20	0.0100	Note 49
Year 3	N	64	1	5.9	5.9	0	100	11	0	0	5.5	61	1.1	0.1	0.0	0.0	0.0	0.0	1.0	0.10	0.21	0.07	0.11	Note 47	
	Vol/NH3	Goat	YES	0.0	0.4	NON	100.00	WWH	1.000	NO	4.4	Goat	0.67					0.0	Goat	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000	ORG	1.00	1.000		0.806	0.0	4.4	Milk/mea	6					0.7	Graz	0.0	0.11	0.0200	0.03	0.0100	Note 49
Year 4	N	64	1	1.0	1.0	0	100	1	0	0	0.9	61	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.02	0.03	0.01	0.02	Note 47	
	Vol/NH3	Goat	YES	0.0	0.1	NON	100.00	SBA	1.000	NO	0.7	Goat	0.65					0.0	Goat	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000	ORG	1.00	1.000		0.806	0.0	0.7	Milk/mea	6					0.1	Graz	0.0	0.02	0.0200	0.01	0.0100	Note 49
Year 5	N	64	1	0.2	0.2	0	100	10	0	0	0.1	61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.01	0.00	0.00	Note 47	
	Vol/NH3	Goat	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.1	Goat	0.66					0.0	Goat	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000	ORG	1.00	1.000		0.806	0.0	0.1	Milk/mea	6					0.0	Graz	0.0	0.00	0.0200	0.00	0.0100	Note 49
Year 6	N	64	1	0.0	0.0	0	100	229	1	0	0.0	61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47	
	Vol/NH3	Goat	YES	0.0	0.0	NON	100.00	WRB	1.000	NO	0.0	Goat	0.84					0.0	Goat	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000	ORG	1.00	1.000		0.806	0.0	0.0	Milk/mea	6					0.0	Graz	0.0	0.00	0.0200	0.00	0.0100	Note 49
Year 7	N	64	1	0.0	0.0	0	100	11	0	0	0.0	61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47	
	Vol/NH3	Goat	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Goat	0.67					0.0	Goat	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000	ORG	1.00	1.000		0.806	0.0	0.0	Milk/mea	6					0.0	Graz	0.0	0.00	0.0200	0.00	0.0100	Note 49
Year 8	N	64	1	0.0	0.0	0	100	11	0	0	0.0	61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47	
	Vol/NH3	Goat	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Goat	0.67					0.0	Goat	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000	ORG	1.00	1.000		0.806	0.0	0.0	Milk/mea	6					0.0	Graz	0.0	0.00	0.0200	0.00	0.0100	Note 49
Year 9	N	64	1	0.0	0.0	0	100	1	0	0	0.0	61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47	
	Vol/NH3	Goat	YES	0.0	0.0	NON	100.00	SBA	1.000	NO	0.0	Goat	0.65					0.0	Goat	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000	ORG	1.00	1.000		0.806	0.0	0.0	Milk/mea	6					0.0	Graz	0.0	0.00	0.0200	0.00	0.0100	Note 49
Year 10	N	64	1	0.0	0.0	0	100	10	0	0	0.0	61	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00	Note 47	
	Vol/NH3	Goat	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Goat	0.66					0.0	Goat	0.0	0.00	0.0125	0.00	0.0100	Note 48
	N leach	Graz	0.484	1.000	ORG	1.00	1.000		0.806	0.0	0.0	Milk/mea	6					0.0	Graz	0.0	0.00	0.0200	0.00	0.0100	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

0.02

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0.82

1.19

Note 50

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:

Value

0.0000

0.00

1.00

Kind of source

Total IPCC and non IPCC N2O

5.10

5.10

5.92

Note 51

2.74

Note 51

2.74

Note 51

3.57

Note 51

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

Year

Fertilizer/manure
#

Store
1/0

Amounts
Store

Field
1/0

Or-
ganic

Norm
proportion, %

Crop
#

Straw
used
1/0

Cereal
benefit
1/0

Fodder:
Uses #21-61

N crop
#71/

Fuel/
bev
#8

Manure
handling

Final
N a-

N2O-N emission
IPCC 1996

N2O-N emission
IPCC 2006

Total
Total

Note 44
Note 44
Note 44
Note 44

Total Year 1-10	N NH3 N leach	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 %									
		ACCORDING TO										IPCC 1996										IPCC 2006										3.3										3.3									
		FIRST YEAR										0.0706										0.0392										15.7										15.7									
		TOTAL										0.1021										0.0591										81.2										100.2									

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

1.2485

0.7231

Note 46

Year 1	N	1	1	100.0	100.0	0	100	229	1	0	97.8	71	0.0	0.0	40.0	0.0	0.0	71	0.0	Green	40.0	1.36	2.83	1.11	1.57	Note 47
	Vol/NH3	N	YES	0.0	2.2	NON	100.00	WRB	1.000	NO	57.8	N crop	0.84								0.02	0.0125	0.02	0.0100	Note 48	
	N leach		1.022	1.000	ORG	1.00	1.000		0.591	0.0	57.8	high N	71	10.9	High	0.0	1.45	0.0000	0.43	0.0000	Note 49					
Year 2	N	71	1	40.0	40.0	0	100	11	0	0	30.0	21	11.2	2.6	0.0	0.0	0.0	21	8.6	0.43	1.01	0.39	0.64	Note 47		
	Vol/NH3	Green	YES	0.0	10.0	NON	100.00	WWH	1.000	NO	18.8	Cattle	0.67								0.11	0.0125	0.11	0.0100	Note 48	
	N leach	High	0.933	1.000	ORG	1.00	1.000		0.627	0.0	18.8	Dairy	2	4.1	Liquid	0.0	0.47	0.0010	0.14	0.0050	Note 49					
Year 3	N	21	1	8.0	7.8	0	100	11	0	0	5.9	21	2.2	0.5	0.0	0.0	0.0	21	1.7	0.08	0.20	0.08	0.13	Note 47		
	Vol/NH3	Cattle	YES	0.2	2.0	NON	100.00	WWH	1.000	NO	3.7	Cattle	0.67								0.02	0.0125	0.02	0.0100	Note 48	
	N leach	Liquid	0.933	1.016	ORG	1.00	1.000		0.627	0.0	3.7	Dairy	2	0.8	Liquid	0.0	0.09	0.0010	0.03	0.0050	Note 49					
Year 4	N	21	1	1.6	1.5	0	100	1	0	0	1.1	21	0.4	0.1	0.0	0.0	0.0	21	0.3	0.02	0.04	0.01	0.02	Note 47		
	Vol/NH3	Cattle	YES	0.0	0.4	NON	100.00	SBA	1.000	NO	0.7	Cattle	0.65								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	0.7	Dairy	2	0.2	Liquid	0.0	0.02	0.0010	0.01	0.0050	Note 49					
Year 5	N	21	1	0.3	0.3	0	100	10	0	0	0.2	21	0.1	0.0	0.0	0.0	0.0	21	0.1	0.00	0.01	0.00	0.00	Note 47		
	Vol/NH3	Cattle	YES	0.0	0.1	NON	100.00	WBA	1.000	NO	0.1	Cattle	0.66								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	0.00	0.0010	0.00	0.0050	Note 49					
Year 6	N	21	1	0.1	0.1	0	100	229	1	0	0.0	71	0.0	0.0	0.0	0.0	0.0	71	0.0	0.00	0.00	0.00	0.00	Note 47		
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WRB	1.000	NO	0.0	N crop	0.84								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	high N	71	0.0	0.0	0.0	0.0	High	0.0	0.00	0.0000	0.00	0.0050	Note 49		
Year 7	N	71	1	0.0	0.0	0	100	11	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		
	Vol/NH3	Green	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Cattle	0.67								0.00	0.0125	0.00	0.0100	Note 48	
	N leach	High	0.933	1.000	ORG	1.00	1.000		0.627	0.0	0.0	Dairy	2	0.0	0.0	0.0	0.0	Cattle	0.0	0.00	0.0010	0.00	0.0050	Note 49		
Year 8	N	21	1	0.0	0.0	0	100	11	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		
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Cattle	0.67								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	0.0	0.0	0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49		
Year 9	N	21	1	0.0	0.0	0	100	1	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		
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	SBA	1.000	NO	0.0	Cattle	0.65								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	0.0	0.0	0.0	Cattle	0.0	0.00	0.0010	0.00	0.0050	Note 49		
Year 10	N	21	1	0.0	0.0	0	100	10	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		
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Cattle	0.66								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	0.0	0.0	0.0	Liquid	0.0	0.00	0.0010	0.00	0.0050	Note 49		

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

Note 50

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:

Value

0.0000

0.00

1.00

Kind of source

Total IPCC and non IPCC N2O

4.08

4.08

5.07

Note 51

2.37

2.37

3.35

Note 51

Note 51

Note 51

Note 51

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

Year

Fertilizer/manure #

Store 1/0

Store Amounts

Field 1/0

Or-ganic 1/0

Nnorm propor tion, %

Crop #

Straw used 1/0

Cereal benefit 1/0

Use #

Fodder: Uses #21-61

Fed

Food

N crop #71/

Fuel/ bev #8

Fuel/ other #9

Manure handling N a-

Final N a-

N2O-N emission IPCC 1996

N2O-N emission IPCC 2006

Note 44
Note 44
Note 44

Total N	RATIO OF N2O-N TO N IN FIRST CROP														
	ACCORDING TO			IPCC 1996			IPCC 2006			TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED			1.9		
	FIRST YEAR			0.0706			0.0392			TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3			14.2		
	TOTAL			0.1023			0.0579			TOTAL N AMOUNTS IN KG AND % LEACHED			84.0		

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

2.1892

1.2381

Note 46

Year 1	N	1	1	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	1.57
	Vol/NH3	N	YES	0.0	2.2	NON	100.00	WRB	1.000	NO	57.8	N crop	0.84					0.0	Green	0.02	0.0125	0.02	0.0100
	N leach		1.022	1.000		ORG	1.00	1.000	0.591	0.0	57.8	low N	72	10.9	Low			0.0	0.0000	0.43	0.0000	0.43	
Year 2	N	72	1	40.0	40.0	0	100	11	0	0	30.0	21	6.4	1.5	0.0	0.0	0.0	21	4.9	0.43	1.12	0.37	
	Vol/NH3	Green	YES	0.0	10.0	NON	100.00	WWH	1.000	NO	23.6	Cattle	0.67					0.0	Cattle	0.10	0.0125	0.10	
	N leach	Low	0.533	1.000		ORG	1.00	1.000	0.787	0.0	23.6	Dairy	2					4.1	Liquid	0.59	0.0010	0.18	
Year 3	N	21	1	4.6	4.5	0	100	11	0	0	3.4	21	1.3	0.3	0.0	0.0	0.0	21	1.0	0.05	0.11	0.04	
	Vol/NH3	Cattle	YES	0.1	1.1	NON	100.00	WWH	1.000	NO	2.1	Cattle	0.67					0.0	Cattle	0.01	0.0125	0.01	
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.627	0.0	2.1	Dairy	2					0.5	Liquid	0.05	0.0010	0.02	
Year 4	N	21	1	0.9	0.9	0	100	1	0	0	0.7	21	0.2	0.1	0.0	0.0	0.0	21	0.2	0.01	0.02	0.01	
	Vol/NH3	Cattle	YES	0.0	0.2	NON	100.00	SBA	1.000	NO	0.4	Cattle	0.65					0.0	Cattle	0.00	0.0125	0.00	
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.627	0.0	0.4	Dairy	2					0.1	Liquid	0.01	0.0010	0.00	
Year 5	N	21	1	0.2	0.2	0	100	10	0	0	0.1	21	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.1	Cattle	0.66					0.0	Cattle	0.00	0.0125	0.00	
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.627	0.0	0.1	Dairy	2					0.0	Liquid	0.00	0.0010	0.00	
Year 6	N	21	1	0.0	0.0	0	100	229	1	0	0.0	72	0.0	0.0	0.0	0.0	0.0	72	0.0	0.00	0.00	0.00	
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WRB	1.000	NO	0.0	N crop	0.84					0.0	Green	0.00	0.0125	0.00	
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.627	0.0	0.0	low N	72					0.0	Low	0.00	0.0000	0.00	
Year 7	N	72	1	0.0	0.0	0	100	11	0	0	0.0	21	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	
	Vol/NH3	Green	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Cattle	0.67					0.0	Cattle	0.00	0.0125	0.00	
	N leach	Low	0.533	1.000		ORG	1.00	1.000	0.787	0.0	0.0	Dairy	2					0.0	Liquid	0.00	0.0010	0.00	
Year 8	N	21	1	0.0	0.0	0	100	11	0	0	0.0	21	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WWH	1.000	NO	0.0	Cattle	0.67					0.0	Cattle	0.00	0.0125	0.00	
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.627	0.0	0.0	Dairy	2					0.0	Liquid	0.00	0.0010	0.00	
Year 9	N	21	1	0.0	0.0	0	100	1	0	0	0.0	21	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	SBA	1.000	NO	0.0	Cattle	0.65					0.0	Cattle	0.00	0.0125	0.00	
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.627	0.0	0.0	Dairy	2					0.0	Liquid	0.00	0.0010	0.00	
Year 10	N	21	1	0.0	0.0	0	100	10	0	0	0.0	21	0.0	0.0	0.0	0.0	0.0	21	0.0	0.00	0.00	0.00	
	Vol/NH3	Cattle	YES	0.0	0.0	NON	100.00	WBA	1.000	NO	0.0	Cattle	0.66					0.0	Cattle	0.00	0.0125	0.00	
	N leach	Liquid	0.933	1.016		ORG	1.00	1.000	0.627	0.0	0.0	Dairy	2					0.0	Liquid	0.00	0.0010	0.00	

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

1.24

Note 50

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:

Value

0.0000

0.00

1.00

Kind of source

Total IPCC and non IPCC N2O

4.09

4.09

4.95

Note 51

2.31

2.31

3.17

Note 51

Note 51

Note 51

Note 51

N CHAIN STARTING WITH N FERTILIZER AND CONTINUING WITH 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

Year	Fertilizer/manure #	Store	Amounts	Field	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	Food #8	Fuel/ bev #9	Manure handling N a-	Final N a-	N2O-N emission IPCC 1996	N2O-N emission IPCC 2006	Total	Total	Note 44 Note 44
	Name	1/0	Store	Field	1/0	Name	#	1/0	1/0	leach	Name	Fed	#72	#8	#9	# Name	mounts	Each	Each	Total	Total	Note 44 Note 44

Total N	RATIO OF N2O-N TO N IN FIRST CROP										TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED										1.36	3.83	1.11	1.87	Note 45
Year N NH3	ACCORDING TO IPCC 1996										TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3										0.02	0.02	0.02	0.02	Note 45
1-10 N leach	FIRST YEAR										TOTAL N AMOUNTS IN KG AND % LEACHED										2.45	0.73	0.73	0.73	Note 45
TOTAL										TOTAL N AMOUNTS IN KG AND %										100.0		97.8	97.8	100.0	Note 45

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

Year 1	N	1	1	100.0	100.0	0	100	229	1	0	97.8	0	0.0	0.0	0.0	0.0	0.0	0	40.0	1.36	3.83	1.11	1.87	Note 47
	Vol/NH3	N	YES	0.0	2.2	NON	100.00	WRB	1,000	NO	57.8	Waste	0.84					0.0	0.0	0.02	0.0125	0.02	0.0100	Note 48
	N leach		1.022	1,000	ORG	1.00	1,000		0.591	0.0	57.8	in field	0				10.9	40.0	2.45	0.0000	0.73	0.0000	Note 49	
Year 2	N	0	1	0.0	0.0	0	100	11	0	0	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	None	YES	0.0	0.0	NON	100.00	NO	1,000	NO	0.0	Waste	0.67				0.0	0.0	0.0	0.0125	0.00	0.0100	Note 48	
	N leach		1,000	1,000	ORG	1.00	1,000		0.600	0.0	0.0	in field	0				0.0	0.0	0.0000	0.00	0.0000	0.00	0.0000	Note 49
Year 3	N	0	1	0.0	0.0	0	100	11	0	0	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	None	YES	0.0	0.0	NON	100.00	NO	1,000	NO	0.0	Waste	0.67				0.0	0.0	0.0	0.0125	0.00	0.0100	Note 48	
	N leach		1,000	1,000	ORG	1.00	1,000		0.600	0.0	0.0	in field	0				0.0	0.0	0.0000	0.00	0.0000	0.00	0.0000	Note 49
Year 4	N	0	1	0.0	0.0	0	100	1	0	0	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	None	YES	0.0	0.0	NON	100.00	NO	1,000	NO	0.0	Waste	0.65				0.0	0.0	0.0	0.0125	0.00	0.0100	Note 48	
	N leach		1,000	1,000	ORG	1.00	1,000		0.600	0.0	0.0	in field	0				0.0	0.0	0.0000	0.00	0.0000	0.00	0.0000	Note 49
Year 5	N	0	1	0.0	0.0	0	100	10	0	0	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	None	YES	0.0	0.0	NON	100.00	NO	1,000	NO	0.0	Waste	0.66				0.0	0.0	0.0	0.0125	0.00	0.0100	Note 48	
	N leach		1,000	1,000	ORG	1.00	1,000		0.600	0.0	0.0	in field	0				0.0	0.0	0.0000	0.00	0.0000	0.00	0.0000	Note 49
Year 6	N	0	1	0.0	0.0	0	100	229	1	0	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	None	YES	0.0	0.0	NON	100.00	NO	1,000	NO	0.0	Waste	0.84				0.0	0.0	0.0	0.0125	0.00	0.0100	Note 48	
	N leach		1,000	1,000	ORG	1.00	1,000		0.600	0.0	0.0	in field	0				0.0	0.0	0.0000	0.00	0.0000	0.00	0.0000	Note 49
Year 7	N	0	1	0.0	0.0	0	100	11	0	0	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	None	YES	0.0	0.0	NON	100.00	NO	1,000	NO	0.0	Waste	0.67				0.0	0.0	0.0	0.0125	0.00	0.0100	Note 48	
	N leach		1,000	1,000	ORG	1.00	1,000		0.600	0.0	0.0	in field	0				0.0	0.0	0.0000	0.00	0.0000	0.00	0.0000	Note 49
Year 8	N	0	1	0.0	0.0	0	100	11	0	0	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	None	YES	0.0	0.0	NON	100.00	NO	1,000	NO	0.0	Waste	0.67				0.0	0.0	0.0	0.0125	0.00	0.0100	Note 48	
	N leach		1,000	1,000	ORG	1.00	1,000		0.600	0.0	0.0	in field	0				0.0	0.0	0.0000	0.00	0.0000	0.00	0.0000	Note 49
Year 9	N	0	1	0.0	0.0	0	100	1	0	0	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	None	YES	0.0	0.0	NON	100.00	NO	1,000	NO	0.0	Waste	0.65				0.0	0.0	0.0	0.0125	0.00	0.0100	Note 48	
	N leach		1,000	1,000	ORG	1.00	1,000		0.600	0.0	0.0	in field	0				0.0	0.0	0.0000	0.00	0.0000	0.00	0.0000	Note 49
Year 10	N	0	1	0.0	0.0	0	100	10	0	0	0.0	0	0.0	0.0	0.0	0.0	0.0	0	0.0	0.00	0.00	0.00	0.00	Note 47
	Vol/NH3	None	YES	0.0	0.0	NON	100.00	NO	1,000	NO	0.0	Waste	0.66				0.0	0.0	0.0	0.0125	0.00	0.0100	Note 48	
	N leach		1,000	1,000	ORG	1.00	1,000		0.600	0.0	0.0	in field	0				0.0	0.0	0.0000	0.00	0.0000	0.00	0.0000	Note 49

Year

Area with crop, ha

Possible additional non IPCC N2O-N emissions	Value	Kind of source	Total IPCC and non IPCC N2O	Note 51
N residues emissions, ratio of N2O-N to N:	0.0000	0.00 Current crops	3.83	1.87 Note 51
Increased soil N emissions, kg N2O-N/ha:	0.00	0.00 Total anthropogenic	3.83	1.87 Note 51
Natural background emissions, kg N2O-N/ha:	1.00	0.69 Total including natural	4.52	2.56 Note 51

SUMMARY CATTLE DAIRY

N CHAIN STARTING WITH AND CONTINUING WITH

N FERTILIZER LIQUID CATTLE MANURE

WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR

CATTLE DAIRY CATTLE DAIRY

Total N	RATIO OF N2O-N TO N IN FIRST CROP	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	13.92	13.85	1.73	3.69	1.56	2.24	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	13.74	13.67	0.14		0.14		Note 45
1-10 N leach	FIRST YEAR	0.0719	0.0431	TOTAL N AMOUNTS IN KG AND % LEACHED	72.86	72.49	1.82		0.55		Note 45
TOTAL		0.0923	0.0560	TOTAL N AMOUNTS IN KG AND %	100.52	100.00					Note 45

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

Area with crop, ha				Total/year 1	0.88	1.27	0.2652	0.1610	Note 46
Natural background emissions, kg N2O-N/ha:					0.88		4.57	3.12	Note 50 Note 51

N CHAIN STARTING WITH AND CONTINUING WITH

N FERTILIZER SEPARATED CATTLE MANURE

WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR

CATTLE DAIRY CATTLE DAIRY

Total N	RATIO OF N2O-N TO N IN FIRST CROP	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	13.65	13.58	2.02	3.98	1.54	2.23	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	14.27	14.19	0.14		0.14		Note 45
1-10 N leach	FIRST YEAR	0.0780	0.0429	TOTAL N AMOUNTS IN KG AND % LEACHED	72.60	72.22	1.81		0.54		Note 45
TOTAL		0.0995	0.0557	TOTAL N AMOUNTS IN KG AND %	100.52	100.00					Note 45

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

Area with crop, ha				Total/year 1	0.86	1.24	0.2914	0.1632	Note 46
Natural background emissions, kg N2O-N/ha:					0.86		4.84	3.09	Note 50 Note 51

N CHAIN STARTING WITH AND CONTINUING WITH

N FERTILIZER CATTLE DEEP LITTER

WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR

CATTLE DAIRY CATTLE DAIRY

Total N	RATIO OF N2O-N TO N IN FIRST CROP	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	12.82	12.25	2.21	4.20	1.47	2.21	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	20.39	19.47	0.20		0.20		Note 45
1-10 N leach	FIRST YEAR	0.0843	0.0430	TOTAL N AMOUNTS IN KG AND % LEACHED	71.49	68.28	1.79		0.54		Note 45
TOTAL		0.1050	0.0553	TOTAL N AMOUNTS IN KG AND %	104.71	100.00					Note 45

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

Area with crop, ha				Total/year 1	0.78	1.13	0.3274	0.1726	Note 46
Natural background emissions, kg N2O-N/ha:					0.78		4.98	3.00	Note 50 Note 51

N CHAIN STARTING WITH AND CONTINUING WITH

N FERTILIZER MANURE FROM GRAZING CATTLE

WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR

CATTLE DAIRY CATTLE DAIRY

Total N	RATIO OF N2O-N TO N IN FIRST CROP	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	13.19	13.19	2.44	4.55	2.12	2.79	Note 45
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	4.49	4.49	0.04		0.04		Note 45
1-10 N leach	FIRST YEAR	0.0847	0.0533	TOTAL N AMOUNTS IN KG AND % LEACHED	82.32	82.32	2.06		0.62		Note 45
TOTAL		0.1137	0.0697	TOTAL N AMOUNTS IN KG AND %	100.00	100.00					Note 45

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

Area with crop, ha				Total/year 1	0.79	1.14	0.3447	0.2112	Note 46
Natural background emissions, kg N2O-N/ha:					0.79		5.34	3.58	Note 50 Note 51

SUMMARY CATTLE BEEF

N CHAIN STARTING WITH AND CONTINUING WITH

N FERTILIZER LIQUID CATTLE MANURE

WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR

CATTLE BEEF CATTLE BEEF

Total N	RATIO OF N2O-N TO N IN FIRST CROP	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	12.38	12.31	1.75	3.74	1.58	2.28
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	14.42	14.34	0.14	0.14	0.14	Note 45
1-10 N leach	FIRST YEAR	0.0719	0.0432	TOTAL N AMOUNTS IN KG AND % LEACHED	73.75	73.35	1.84	0.55	0.55	Note 45
TOTAL	TOTAL	0.0936	0.0570	TOTAL N AMOUNTS IN KG AND %	100.55	100.00				Note 45

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

Area with crop, ha	Total/year 1	0.89	1.29	0.1841	Note 46
Natural background emissions, kg N2O-N/ha:		0.89			

N CHAIN STARTING WITH AND CONTINUING WITH

N FERTILIZER SEPARATED CATTLE MANURE

WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR

CATTLE BEEF CATTLE BEEF

Total N	RATIO OF N2O-N TO N IN FIRST CROP	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	12.13	12.07	2.06	4.05	1.57	2.27
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	14.96	14.88	0.15	0.15	0.15	Note 45
1-10 N leach	FIRST YEAR	0.0784	0.0431	TOTAL N AMOUNTS IN KG AND % LEACHED	73.45	73.05	1.84	0.55	0.55	Note 45
TOTAL	TOTAL	0.1011	0.0567	TOTAL N AMOUNTS IN KG AND %	100.55	100.00				Note 45

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

Area with crop, ha	Total/year 1	0.87	1.25	0.1868	Note 46
Natural background emissions, kg N2O-N/ha:		0.78			

N CHAIN STARTING WITH AND CONTINUING WITH

N FERTILIZER CATTLE DEEP LITTER

WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR

CATTLE BEEF CATTLE BEEF

Total N	RATIO OF N2O-N TO N IN FIRST CROP	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	11.36	10.82	2.25	4.27	1.49	2.25
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	21.37	20.36	0.21	0.21	0.21	Note 45
1-10 N leach	FIRST YEAR	0.0850	0.0432	TOTAL N AMOUNTS IN KG AND % LEACHED	72.23	68.82	1.81	0.54	0.54	Note 45
TOTAL	TOTAL	0.1068	0.0562	TOTAL N AMOUNTS IN KG AND %	104.96	100.00				Note 45

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

Area with crop, ha	Total/year 1	0.79	1.14	0.1979	Note 46
Natural background emissions, kg N2O-N/ha:		0.79			

N CHAIN STARTING WITH AND CONTINUING WITH

N FERTILIZER MANURE FROM GRAZING CATTLE

WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR

CATTLE BEEF CATTLE BEEF

Total N	RATIO OF N2O-N TO N IN FIRST CROP	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	11.70	11.70	2.50	4.64	2.18	2.85
Year N NH3	ACCORDING TO	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	4.62	4.62	0.05	0.05	0.05	Note 45
1-10 N leach	FIRST YEAR	0.0854	0.0540	TOTAL N AMOUNTS IN KG AND % LEACHED	83.68	83.68	2.09	0.63	0.63	Note 45
TOTAL	TOTAL	0.1161	0.0713	TOTAL N AMOUNTS IN KG AND %	100.00	100.00				Note 45

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

Area with crop, ha	Total/year 1	0.80	1.15	0.2439	Note 46
Natural background emissions, kg N2O-N/ha:		0.80			

SUMMARY PIG PORK

N CHAIN STARTING WITH AND CONTINUING WITH

N FERTILIZER LIQUID PIG MANURE

WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR

PIG PORK PIG PORK

Total N	RATIO OF N2O-N TO N IN FIRST CROP	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	19.58	19.58	1.63	3.45	1.43	2.07
Year N NH3	ACCORDING TO	0.0720	0.0426	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	12.35	12.35	0.12		0.12	Note 45
1-10 N leach	FIRST YEAR	0.0863	0.0516	TOTAL N AMOUNTS IN KG AND % LEACHED	68.07	68.07	1.70		0.51	Note 45
	TOTAL			TOTAL N AMOUNTS IN KG AND %	100.00	100.00				Note 45

N2O-N/N in food/beverage/fuel/other							0.1762		0.1055	Note 46
Area with crop, ha					Total/year 1					
Natural background emissions, kg N2O-N/ha:					0.84	1.21				Note 50
					0.84			4.29		2.90 Note 51

N CHAIN STARTING WITH AND CONTINUING WITH

N FERTILIZER SEPARATED PIG MANURE

WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR

PIG PORK PIG PORK

Total N	RATIO OF N2O-N TO N IN FIRST CROP	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	18.58	18.48	1.76	3.58	1.37	2.02
Year N NH3	ACCORDING TO	0.0767	0.0427	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	15.77	15.69	0.16		0.16	Note 45
1-10 N leach	FIRST YEAR	0.0894	0.0506	TOTAL N AMOUNTS IN KG AND % LEACHED	66.16	65.83	1.65		0.50	Note 45
	TOTAL			TOTAL N AMOUNTS IN KG AND %	100.51	100.00				Note 45

N2O-N/N in food/beverage/fuel/other							0.1925		0.1090	Note 46
Area with crop, ha					Total/year 1					
Natural background emissions, kg N2O-N/ha:					0.79	1.13				Note 50
					0.79			4.36		2.81 Note 51

N CHAIN STARTING WITH AND CONTINUING WITH

N FERTILIZER PIG DEEP LITTER

WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR

PIG PORK PIG PORK

Total N	RATIO OF N2O-N TO N IN FIRST CROP	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	18.11	17.69	1.87	3.68	1.32	2.00
Year N NH3	ACCORDING TO	0.0808	0.0429	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	20.23	19.75	0.20		0.20	Note 45
1-10 N leach	FIRST YEAR	0.0919	0.0501	TOTAL N AMOUNTS IN KG AND % LEACHED	64.07	62.56	1.60		0.48	Note 45
	TOTAL			TOTAL N AMOUNTS IN KG AND %	102.40	100.00				Note 45

N2O-N/N in food/beverage/fuel/other							0.2030		0.1107	Note 46
Area with crop, ha					Total/year 1					
Natural background emissions, kg N2O-N/ha:					0.76	1.10				Note 50
					0.76			4.44		2.77 Note 51

N CHAIN STARTING WITH AND CONTINUING WITH

N FERTILIZER MANURE FROM ROOTING PIGS

WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR

PIG PORK PIG PORK

Total N	RATIO OF N2O-N TO N IN FIRST CROP	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	19.70	19.70	2.27	4.22	1.96	2.57
Year N NH3	ACCORDING TO	0.0823	0.0509	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	4.12	4.12	0.04		0.04	Note 45
1-10 N leach	FIRST YEAR	0.1054	0.0643	TOTAL N AMOUNTS IN KG AND % LEACHED	76.18	76.18	1.90		0.57	Note 45
	TOTAL			TOTAL N AMOUNTS IN KG AND %	100.00	100.00				Note 45

N2O-N/N in food/beverage/fuel/other							0.2140		0.1307	Note 46
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 Note 51

SUMMARY POULTRY MEAT

N CHAIN STARTING WITH AND CONTINUING WITH

N FERTILIZER LIQUID POULTRY MANURE

WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR

POULTRY MEAT POULTRY MEAT

Total N	RATIO OF N2O-N TO N IN FIRST CROP	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	22.98	22.98	1.59	3.37	1.38	
Year N NH3	ACCORDING TO	0.0716	0.0419	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	9.67	9.67	0.10		0.10	1.99 Note 45
1-10 N leach	FIRST YEAR	0.0842	0.0497	TOTAL N AMOUNTS IN KG AND % LEACHED	67.34	67.34	1.68		0.51	Note 45
	TOTAL			TOTAL N AMOUNTS IN KG AND %	100.00	100.00				Note 45

N2O-N/N in food/beverage/fuel/other							0.1465			0.0864 Note 46
Area with crop, ha					Total/year 1					
Natural background emissions, kg N2O-N/ha:					0.80	1.15				Note 50
					0.80			4.17		2.79 Note 51

N CHAIN STARTING WITH AND CONTINUING WITH

N FERTILIZER SEPARATED POULTRY MANURE

WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR

POULTRY MEAT POULTRY MEAT

Total N	RATIO OF N2O-N TO N IN FIRST CROP	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	22.20	22.20	1.67	3.42	1.31	1.93 Note 45
Year N NH3	ACCORDING TO	0.0757	0.0423	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	13.33	13.33	0.13		0.13	Note 45
1-10 N leach	FIRST YEAR	0.0854	0.0483	TOTAL N AMOUNTS IN KG AND % LEACHED	64.46	64.46	1.61		0.48	Note 45
	TOTAL			TOTAL N AMOUNTS IN KG AND %	100.00	100.00				Note 45

N2O-N/N in food/beverage/fuel/other							0.1539			0.0869 Note 46
Area with crop, ha					Total/year 1					
Natural background emissions, kg N2O-N/ha:					0.77	1.11				Note 50
					0.77			4.18		2.70 Note 51

N CHAIN STARTING WITH AND CONTINUING WITH

N FERTILIZER POULTRY DEEP LITTER

WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR

POULTRY MEAT POULTRY MEAT

Total N	RATIO OF N2O-N TO N IN FIRST CROP	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	21.34	21.31	1.71	3.46	1.27	1.90 Note 45
Year N NH3	ACCORDING TO	0.0785	0.0427	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	15.15	15.13	0.15		0.15	Note 45
1-10 N leach	FIRST YEAR	0.0864	0.0474	TOTAL N AMOUNTS IN KG AND % LEACHED	63.66	63.56	1.59		0.48	Note 45
	TOTAL			TOTAL N AMOUNTS IN KG AND %	100.16	100.00				Note 45

N2O-N/N in food/beverage/fuel/other							0.1620			0.0888 Note 46
Area with crop, ha					Total/year 1					
Natural background emissions, kg N2O-N/ha:					0.73	1.06				Note 50
					0.73			4.19		2.63 Note 51

N CHAIN STARTING WITH AND CONTINUING WITH

N FERTILIZER MANURE FROM SCRAPING POULTRY

WINTER RAPESEED FOR PPO/BIODIESEL AND WINTER WHEAT FOR

POULTRY MEAT POULTRY MEAT

Total N	RATIO OF N2O-N TO N IN FIRST CROP	IPCC 1996	IPCC 2006	TOTAL N AMOUNTS IN KG AND % ENDING AS FOOD/FUEL/OTHER/REMOVED	22.37	22.37	2.07	3.96	1.78	2.37 Note 45
Year N NH3	ACCORDING TO	0.0804	0.0490	TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3	3.70	3.70	0.04		0.04	Note 45
1-10 N leach	FIRST YEAR	0.0989	0.0592	TOTAL N AMOUNTS IN KG AND % LEACHED	73.92	73.92	1.85		0.55	Note 45
	TOTAL			TOTAL N AMOUNTS IN KG AND %	100.00	100.00				Note 45

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		11.67	11.67	1.74	3.73	1.56	2.26 Note 45
Year N NH3	ACCORDING TO			TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		14.64	14.64	0.15		0.15	Note 45
1-1-10 N leach	FIRST YEAR			TOTAL N AMOUNTS IN KG AND % LEACHED		73.69	73.69	1.84		0.55	Note 45
TOTAL				TOTAL N AMOUNTS IN KG AND %		100.00	100.00				Note 45
N2O-N/N in food/beverage/fuel/other											
Area with crop, ha		Total/year 1				0.87	1.25			0.3192	0.1939 Note 46
Natural background emissions, kg N2O-N/ha:						0.87					Note 50
										4.60	3.13 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 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		11.03	11.03	1.87	3.79	1.44	2.16 Note 45
Year N NH3	ACCORDING TO			TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		20.32	20.32	0.20		0.20	Note 45
1-1-10 N leach	FIRST YEAR			TOTAL N AMOUNTS IN KG AND % LEACHED		68.65	68.65	1.72		0.51	Note 45
TOTAL				TOTAL N AMOUNTS IN KG AND %		100.00	100.00				Note 45
N2O-N/N in food/beverage/fuel/other											
Area with crop, ha		Total/year 1				0.81	1.17			0.3435	0.1956 Note 46
Natural background emissions, kg N2O-N/ha:						0.81					Note 50
										4.60	2.97 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 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		10.35	10.32	1.92	3.83	1.36	2.09 Note 45
Year N NH3	ACCORDING TO			TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		22.79	22.73	0.23		0.23	Note 45
1-1-10 N leach	FIRST YEAR			TOTAL N AMOUNTS IN KG AND % LEACHED		67.12	66.95	1.68		0.50	Note 45
TOTAL				TOTAL N AMOUNTS IN KG AND %		100.25	100.00				Note 45
N2O-N/N in food/beverage/fuel/other											
Area with crop, ha		Total/year 1				0.75	1.09			0.3701	0.2016 Note 46
Natural background emissions, kg N2O-N/ha:						0.75					Note 50
										4.58	2.84 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 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	2.53	4.68	2.20	2.88 Note 45
Year N NH3	ACCORDING TO			TOTAL N AMOUNTS IN KG AND % VOLATILISATION/NH3		4.66	4.66	0.05		0.05	Note 45
1-1-10 N leach	FIRST YEAR			TOTAL N AMOUNTS IN KG AND % LEACHED		84.17	84.17	2.10		0.63	Note 45
TOTAL				TOTAL N AMOUNTS IN KG AND %		100.00	100.00				Note 45
N2O-N/N in food/beverage/fuel/other											
Area with crop, ha		Total/year 1				0.80	1.15			0.4189	0.2578 Note 46
Natural background emissions, kg N2O-N/ha:						0.80					Note 50
										5.48	3.68 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 PPO/BIODIESEL AND WINTER WHEAT FOR	SHEEP MILK/MUTTON SHEEP MILK/MUTTON	Note 43 Note 43
Total N Year N NH3 1-10 N leach	RATIO OF N2O-N TO N IN FIRST CROP ACCORDING TO FIRST YEAR TOTAL	IPCC 1996 0.0865 0.1259	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 %	7.13 6.73 2.70 5.04 1.80 0.09 0.68	2.56 Note 45 Note 45 Note 45 Note 45
N2O-N/N in food/beverage/fuel/other				0.7062	Note 46
Area with crop, ha					Note 50
Natural background emissions, kg N2O-N/ha:					Note 51
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
Total N Year N NH3 1-10 N leach	RATIO OF N2O-N TO N IN FIRST CROP ACCORDING TO FIRST YEAR TOTAL	IPCC 1996 0.0878 0.1241	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 %	6.72 6.72 2.71 4.96 1.56 0.05 0.66	2.27 Note 45 Note 45 Note 45 Note 45
N2O-N/N in food/beverage/fuel/other				0.7388	Note 46
Area with crop, ha					Note 50
Natural background emissions, kg N2O-N/ha:					Note 51
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
Total N Year N NH3 1-10 N leach	RATIO OF N2O-N TO N IN FIRST CROP ACCORDING TO FIRST YEAR TOTAL	IPCC 1996 0.0874 0.1157	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 %	4.45 4.21 2.45 4.63 1.60 0.23 0.58	2.42 Note 45 Note 45 Note 45 Note 45
N2O-N/N in food/beverage/fuel/other				1.0401	Note 46
Area with crop, ha					Note 50
Natural background emissions, kg N2O-N/ha:					Note 51
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
Total N Year N NH3 1-10 N leach	RATIO OF N2O-N TO N IN FIRST CROP ACCORDING TO FIRST YEAR TOTAL	IPCC 1996 0.0887 0.1275	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 %	4.59 4.59 2.79 5.10 2.02 0.05 0.68	2.74 Note 45 Note 45 Note 45 Note 45
N2O-N/N in food/beverage/fuel/other				1.1120	Note 46
Area with crop, ha					Note 50
Natural background emissions, kg N2O-N/ha:					Note 51

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

Year N NH3

IPCC 1996

IPCC 2006

1-10 N leach

0.0706

0.0392

2.37

1.60

2.37

Note 45

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

Area with crop, ha

Natural background emissions, kg N2O-N/ha:

0.1021

0.0591

100.16

100.00

1.2485

0.7231

Note 46

N amount in reference crop year 2 after use of N crop as green manure, kg

N amount in reference crop year 1 after synthetic N fertilizer, kg

11.20

40.00

28.00

Note 47

Relative value of green manure, %

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

Year N NH3

IPCC 1996

IPCC 2006

1-10 N leach

0.0706

0.0392

1.87

1.54

2.31

Note 45

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

Area with crop, ha

Natural background emissions, kg N2O-N/ha:

0.1023

0.0579

100.09

100.00

2.1892

1.2381

Note 46

N amount in reference crop year 2 after use of N crop as green manure, kg

N amount in reference crop year 1 after synthetic N fertilizer, kg

6.40

40.00

16.00

Note 47

Relative value of green manure, %

SUMMARY FOOD, FUEL, AND WASTE

N CHAIN STARTING WITH AND CONTINUING WITH

N FERTILIZER NO MANURE

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

Year N NH3

IPCC 1996

1-10 N leach

0.0706

0.0392

0.0392

TOTAL N AMOUNTS IN KG AND %

40.00

2.20

57.80

100.00

1.36

0.02

1.45

100.00

2.83

0.02

1.11

1.57

Note 45

Note 45

Note 45

Note 45

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

0.0706

0.0392

Note 46

Area with crop, ha

Natural background emissions, kg N2O-N/ha:

Total/year 1

0.69

1.00

0.69

0.0706

3.52

2.26

Note 50

Note 51

N CHAIN STARTING WITH AND CONTINUING WITH

N FERTILIZER NO MANURE

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

Year N NH3

IPCC 1996

1-10 N leach

0.0706

0.0392

0.0392

TOTAL N AMOUNTS IN KG AND %

40.00

2.20

57.80

100.00

1.36

0.02

1.45

100.00

2.83

0.02

1.11

1.57

Note 45

Note 45

Note 45

Note 45

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

0.0706

0.0392

Note 46

Area with crop, ha

Natural background emissions, kg N2O-N/ha:

Total/year 1

0.69

1.00

0.69

0.0706

3.52

2.26

Note 50

Note 51

N CHAIN STARTING WITH AND CONTINUING WITH

N FERTILIZER NO MANURE

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

Year N NH3

IPCC 1996

1-10 N leach

0.0706

0.0392

0.0392

TOTAL N AMOUNTS IN KG AND %

40.00

2.20

57.80

100.00

1.36

0.02

1.45

100.00

2.83

0.02

1.11

1.57

Note 45

Note 45

Note 45

Note 45

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

No use

No use

Note 46

Area with crop, ha

Natural background emissions, kg N2O-N/ha:

Total/year 1

0.69

1.00

0.69

No use

3.52

2.26

Note 50

Note 51

N CHAIN STARTING WITH AND CONTINUING WITH

N FERTILIZER NO MANURE

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

Year N NH3

IPCC 1996

1-10 N leach

0.0956

0.0467

0.0467

TOTAL N AMOUNTS IN KG AND %

0.00

2.20

97.80

100.00

0.00

2.20

2.45

100.00

3.83

0.02

1.11

1.87

Note 45

Note 45

Note 45

Note 45

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

No use

No use

Note 46

Area with crop, ha

Natural background emissions, kg N2O-N/ha:

Total/year 1

0.69

1.00

0.69

No use

4.52

2.56

Note 50

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	MIN	MAX	MIN	MAX
	FIRST YEAR	0.0719	0.0854	0.0429	0.0540	3.69	4.64	2.21	2.85

TOTAL	0.0923	0.1161	0.0553	0.0713
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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:

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	MIN	MAX	MIN	MAX
	FIRST YEAR	0.0720	0.0823	0.0426	0.0509	3.45	4.22	2	2.57

TOTAL	0.0863	0.1054	0.0501	0.0643
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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:

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	MIN	MAX	MIN	MAX
	FIRST YEAR	0.0716	0.0858	0.0419	0.0544	3.37	4.68	1.9	2.88

TOTAL	0.0842	0.1169	0.0474	0.0720
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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:

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	MIN	MAX	MIN	MAX
	FIRST YEAR	0.0865	0.0887	0.0392	0.0483	4.63	5.1	2.27	2.74

TOTAL	0.1157	0.1275	0.0567	0.0686
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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:

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	MIN	MAX	MIN	MAX
	FIRST YEAR	0.0716	0.0887	0.0392	0.0544	3.37	5.10	1.90	2.88

TOTAL	0.0842	0.1275	0.0474	0.0720
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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
0.78	0.89	0.78	1.15

MIN	MAX	MIN	MAX
0.76	0.84	0.76	0.84

MIN	MAX	MIN	MAX
0.73	0.87	0.73	0.87

MIN	MAX	MIN	MAX
0.82	0.85	0.82	0.85

MIN	MAX	MIN	MAX
0.73	0.89	0.73	1.15