Netherlands Environmental Assessment Agency

Scenario exercise   Part II

Presentation for the Modelling Planning Workshop
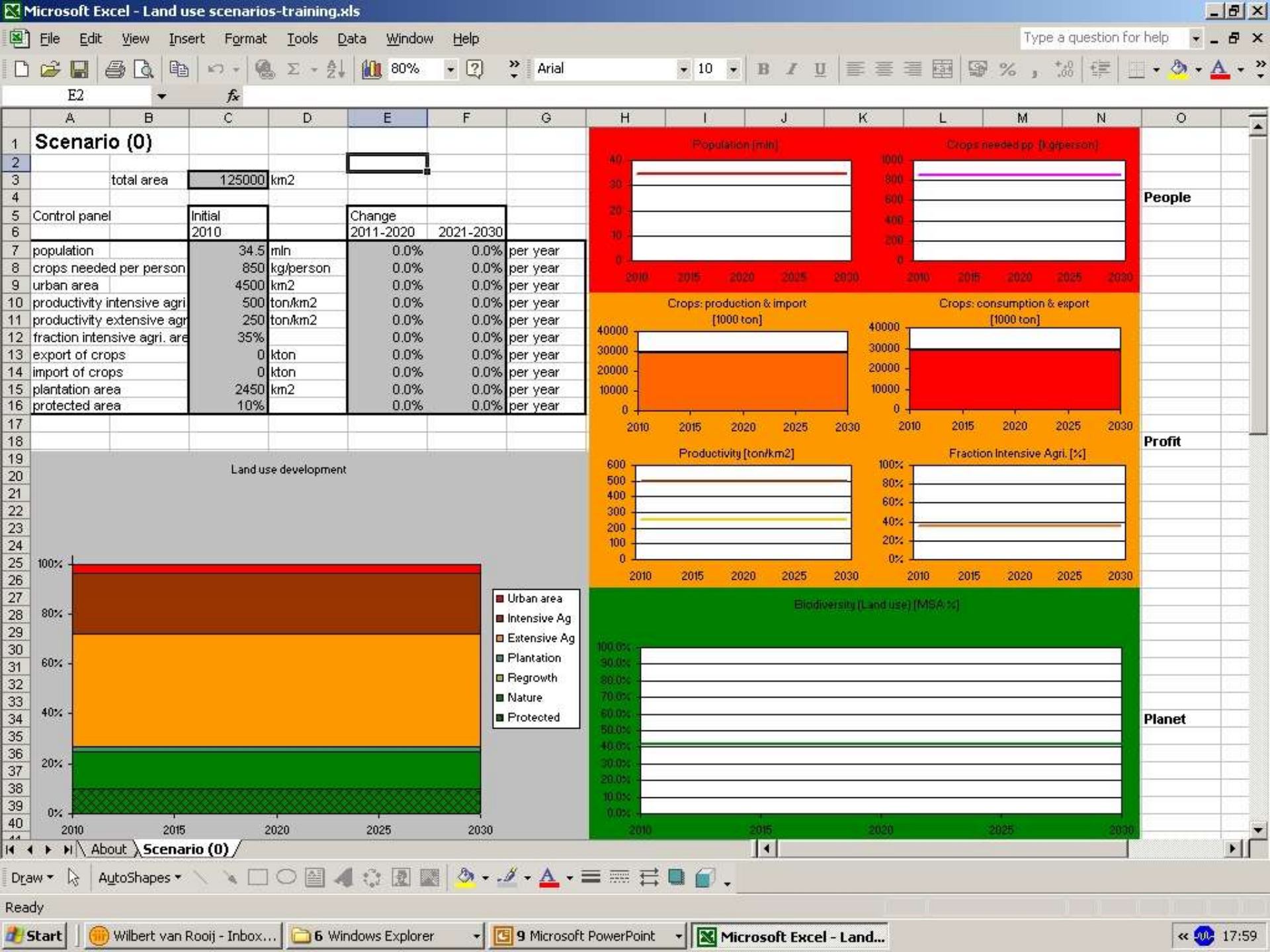
24-26 March 2009, Rio de Janeiro, Brazil

By Wilbert van Rooij

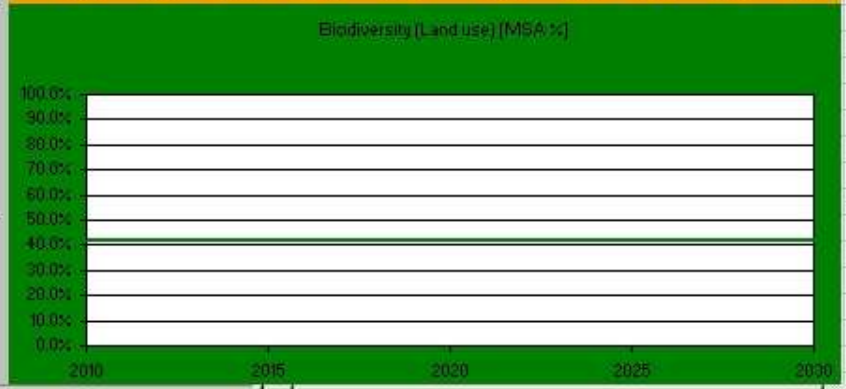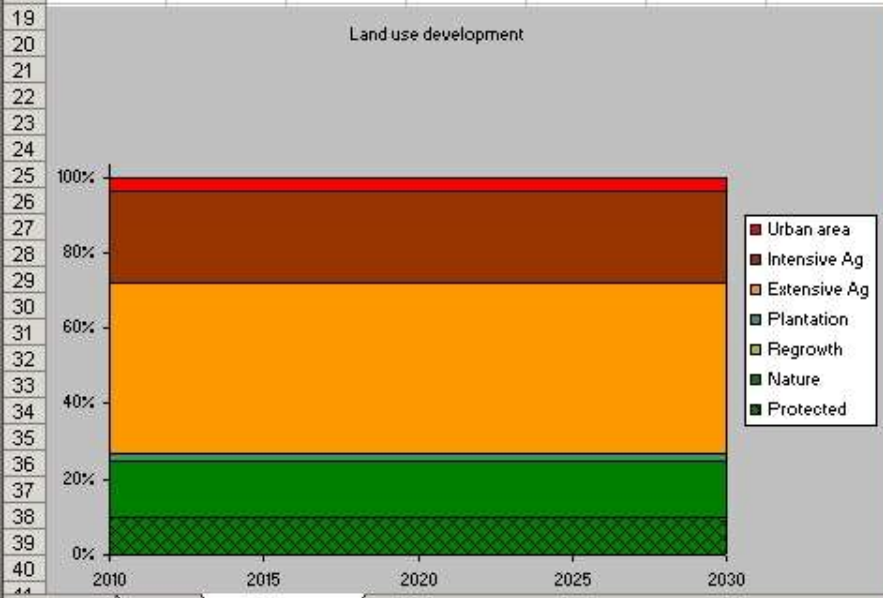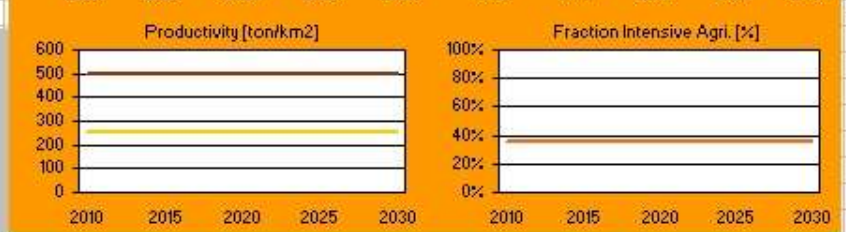Netherlands Environmental Assessment Agency (PBL)

Use scenario information as input for demand table

Now you need to translate the information of the previous exercise into demand figures for 2 periods for the following factors and/or sectors:

Change in %	2011 – 2020	2021-2030
Population growth	..	..
Crops needed	..	..
Urban area growth	..	..
Intensive crop area	..	..
Extensive crop area	..	..
Export crops	..	..
Import crops	..	..
Plantation area	..	..
Protected area	..	..

Netherlands Environmental Assessment Agency
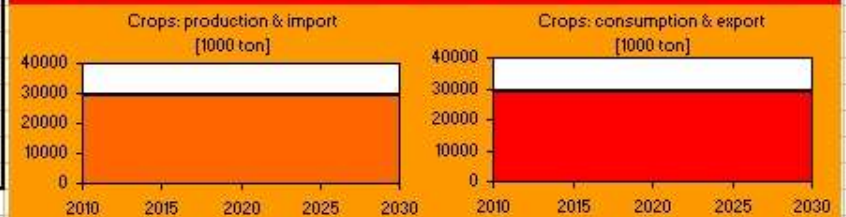
Wilbert van Rooij, March 2009

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Type a question for help

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E2

Scenario (0)

	total area	125000	km2
Control panel		Initial 2010		Change 2011-2020	2021-2030	
population		34.5	mln	0.0%	0.0%	per year
crops needed per person		850	kg/person	0.0%	0.0%	per year
urban area		4500	km2	0.0%	0.0%	per year
productivity intensive agri		500	ton/km2	0.0%	0.0%	per year
productivity extensive agr		250	ton/km2	0.0%	0.0%	per year
fraction intensive agri. are		35%		0.0%	0.0%	per year
export of crops		0	kton	0.0%	0.0%	per year
import of crops		0	kton	0.0%	0.0%	per year
plantation area		2450	km2	0.0%	0.0%	per year
protected area		10%		0.0%	0.0%	per year

People

Population [mln]

Crops needed pp [kg/person]

Crops: production & import [1000 ton]

Crops: consumption & export [1000 ton]

Profit

Productivity [ton/km2]

Fraction Intensive Agri. [%]

Land use development

Urban area
Intensive Ag
Extensive Ag
Plantation
Regrowth
Nature
Protected

Biodiversity [Land use] [MSA %]

Planet

About   Scenario (0)

Draw   AutoShapes

Ready

Start   Wilbert van Rooij - Inbox...   6 Windows Explorer   9 Microsoft PowerPoint   Microsoft Excel - Land...   17:59

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Year	People			Profit						Planet	
	Population [mln]	Crops needed per person [kg/person]	Total crops needed [kton]	Export of crops [kton]	Import of crops [kton]	Local crops production [kton]	Productivity Extensive Agri [ton/km2]	Productivity Intensive Agri [ton/km2]	Fraction Intensive Agri [%]	Protected Area [%]	Biodiversity (Land use) [MSA %]
2010	34.5	850	29325	0	0	29325	250	500	35%	10.0%	41.5%
2011	34.5	850	29325	0	0	29325	250	500	35%	10.0%	41.5%
2012	34.5	850	29325	0	0	29325	250	500	35%	10.0%	41.5%
2013	34.5	850	29325	0	0	29325	250	500	35%	10.0%	41.5%
2014	34.5	850	29325	0	0	29325	250	500	35%	10.0%	41.5%
2015	34.5	850	29325	0	0	29325	250	500	35%	10.0%	41.5%
2016	34.5	850	29325	0	0	29325	250	500	35%	10.0%	41.5%
2017	34.5	850	29325	0	0	29325	250	500	35%	10.0%	41.5%
2018	34.5	850	29325	0	0	29325	250	500	35%	10.0%	41.5%
2019	34.5	850	29325	0	0	29325	250	500	35%	10.0%	41.5%
2020	34.5	850	29325	0	0	29325	250	500	35%	10.0%	41.5%
2021	34.5	850	29325	0	0	29325	250	500	35%	10.0%	41.5%
2022	34.5	850	29325	0	0	29325	250	500	35%	10.0%	41.5%
2023	34.5	850	29325	0	0	29325	250	500	35%	10.0%	41.5%
2024	34.5	850	29325	0	0	29325	250	500	35%	10.0%	41.5%
2025	34.5	850	29325	0	0	29325	250	500	35%	10.0%	41.5%
2026	34.5	850	29325	0	0	29325	250	500	35%	10.0%	41.5%
2027	34.5	850	29325	0	0	29325	250	500	35%	10.0%	41.5%
2028	34.5	850	29325	0	0	29325	250	500	35%	10.0%	41.5%
2029	34.5	850	29325	0	0	29325	250	500	35%	10.0%	41.5%
2030	34.5	850	29325	0	0	29325	250	500	35%	10.0%	41.5%

AutoShapes

Land use

Year MSA	Protected 100% [km2]	Nature 100% [km2]	Regrowth 60% [km2]	Plantation 20% [km2]	Extensive Ag 30% [km2]	Intensive Ag 10% [km2]	Urban area 5% [km2]	Total area [km2]
2010	12500	18661	0	2450	56478	30411	4500	125000
2011	12500	18661	0	2450	56478	30411	4500	125000
2012	12500	18661	0	2450	56478	30411	4500	125000
2013	12500	18661	0	2450	56478	30411	4500	125000
2014	12500	18661	0	2450	56478	30411	4500	125000
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2027	12500	18661	0	2450	56478	30411	4500	125000
2028	12500	18661	0	2450	56478	30411	4500	125000
2029	12500	18661	0	2450	56478	30411	4500	125000
2030	12500	18661	0	2450	56478	30411	4500	125000

About \ **Scenario (0)**

Instructions scenario training module

1. Open the land use scenarios-training.xls spreadsheet

2. Read first the guidelines that are described in the 'About' worksheet

3. Copy the scenario(0) worksheet to a new worksheet

4. Fill in the values from your scenario
   (do not bother about the land size: it's an imaginary country for training purposes only)

See what's happening and try to explain why.

Have fun!!!

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