

# EPNF2 - 3rd meeting

Wageningen University - June 21-22, 2017

[Atlas Building 104](#) Droevendaalsesteeg 4, 6708 PB Wageningen

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## Background

The Expert Panel on Nitrogen and Food ( <http://www.clrtap-tfrn.org/epnf> ) aims “to create a better understanding of the relationship between human diets and the impact of the N-cycle on the environment” (WGSR 47th, September 2010). The objective is to produce a report to Parties of the Convention on the key questions formulated in the Proposed aims, structure and scope for the second phase of the Expert Panel on Nitrogen and Food (EPNF) (WGSR 53rd, December 2015).

During the 1st meeting (Paris, May 2016<sup>1</sup>) the general outline chapters of the EPNF-2 report was identified. At the 2nd meeting (Milan, November 2016<sup>2</sup>), the development of common scenarios was discussed and preliminary outlines of the chapters were presented and discussed. An ‘action plan’ for the next phase was developed. This consisted mainly of review-work done on three topics:

- Nutrition and diets
- Farm level and food chain measures
- Health effects of nitrogen pollution in atmosphere and water

The link to policies and possible societal development should be considered as far as possible.

At the meeting in 11/2016, it was discussed if for each chapter planned in the outline (see below) a peer-reviewed paper could be written, to be published in a special issue tbd. There was agreement however, that in many cases this decision cannot yet be taken, as literature needs first to be reviewed to identify original contribution to the literature. Activities were thus started, mainly with the scope to write review documents the format of which to be decided at a later stage. During this phase, the focus of some of these ‘chapters’ shifted a bit in order to provide added value. This is very welcome, as the Expert Panel strives to provide a comprehensive assessment, adding value to existing evidence with original reviews and partly also with original scientific work (such as data assessment and model simulations). Support to the EPNF report will therefore be given by:

- Peer reviewed review papers providing new perspectives and/or being more comprehensive than existing review papers

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<sup>1</sup> [http://www.clrtap-tfrn.org/sites/clrtap-tfrn.org/files/documents/EPNF2/EPNF2-1\\_minutes.pdf](http://www.clrtap-tfrn.org/sites/clrtap-tfrn.org/files/documents/EPNF2/EPNF2-1_minutes.pdf)

<sup>2</sup> [http://www.clrtap-tfrn.org/sites/clrtap-tfrn.org/files/documents/EPNF2/EPNF2-2\\_minutes.v2.pdf](http://www.clrtap-tfrn.org/sites/clrtap-tfrn.org/files/documents/EPNF2/EPNF2-2_minutes.v2.pdf)

- Peer reviewed papers with new data assessments and model simulations
- Background documents summarizing relevant existing evidence under new perspective and/or more comprehensive than existing review papers, however which are considered not sufficiently 'original' to be published in the peer reviewed literature and/or where their impact is considered to be too low to invest into a full manuscript
- The report will be complemented by 'review blocks' on topics which have already a good coverage in the literature but are considered important to be summarized in order to provide a comprehensive assessment.

The different contributions are schematically illustrated [here](#).

## Objectives of 3rd meeting:

During the 3rd meeting the following

- Discussion results so far and identification of additional need for information
- Discussion of new analyses to be done for EPNF
- Discussion of model set-up/designs of scenarios

The idea is that the meeting paves the way for the next period (about second half of 2017) which should concentrate on:

- Progressing/finalizing with review papers supporting EPNF
- Starting with model simulations (MagPIE and CAPRI)

Goal is to decide on the following topics:

- Which/how many scenarios will be run?
- Which technical options (farm level and food chain) will be linked to which scenario, with which effectiveness?
- What diets will be used for the different scenarios?
- Which policies will be linked to the different scenarios?
- How are the health effects evaluated (both nutrition and pollution)?
- Are there any review papers or missing background documents 'missing' for the final report?

## Agenda

Wednesday 2017-06-21 - Room Atlas 1

12:30	13:30	Arrival - Lunch
13:00	14:00	Session 1: Introduction, recap
14:00	15:30	<p>Session 2: Status of work so far</p> <ul style="list-style-type: none"> <li>• Series of <b>short</b> presentation on progress of work on review papers, with focus on objective of paper, problems, timeline see template <a href="#">here</a></li> <li>• About 5 min each + 5 min discussion</li> </ul> <p>Presentations:</p> <ul style="list-style-type: none"> <li>• Farm-scale NUE (tbd)</li> <li>• Food-waste (G. Carmona)</li> <li>• Food chain (J. Schermuly/I. Koerner)</li> <li>• Full-chain case studies (A Uwizeye)</li> <li>• Alternative protein sources (A Parodi)</li> <li>• Initiatives to make food choices more sustainable (L Temme)</li> <li>• Environmental impact of extra-processed food (R Alessandrini)</li> <li>• Health effects of air pollution (R Kruit for R van Dingenen)</li> <li>• Health effects of water pollution (A. Leip for B. Grizzetti)</li> </ul> <p>Coffee break 15:30-15:45</p>
15:45	16:30	<p>Session 3: Background presentations</p> <ul style="list-style-type: none"> <li>- Sh. Rao: scenarios</li> <li>- B. Bodirsky: diet model</li> <li>- S. Kugelberg/ F. Bartolini: policies</li> </ul>
16:30	18:00	<p>Session 4: Working groups on scenarios and policies</p> <ul style="list-style-type: none"> <li>• Scenarios</li> <li>• Policies for supply chain mitigation</li> <li>• Policies for diets and nutrition</li> </ul>

Thursday 2017-06-22 - Room Atlas 2

0845	09:00	Arrival
09:00	10:30	<p>Session 5 - Linkages between models/chapters:</p> <p><i>In this session we will define the linkage and necessary data sharing between chapter in parts 1 and 2 with the assessment chapters in part 3</i></p>
10:30	11:00	<p>Session 6 - Discussion on missing information for the EPNF report (reviews that could give a separate paper or background document)</p> <p>Coffee break 11:00-11:15</p>
11:15	12:30	Session 7

		<ul style="list-style-type: none"> <li>● Presentation and discussion of decisions made by the working groups.</li> <li>● Actions for next period &amp; overall timeline</li> <li>● Next meeting</li> <li>● AOB</li> </ul>
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## Outline of EPNF report, version 2016-11

- 1 PART 1: Food Chain Nitrogen Use Efficiency**
  - 1.1 The limits of Farm-scale NUE
  - 1.2 Food losses and circular nitrogen flows in the post farm gate food chain
  - 1.3 Full chain NUE in Europe and case studies
- 2 PART 2: The relevance of Nitrogen for a healthy society**
  - 2.1 Dietary recommendations & nutrition scores of diet
  - 2.2 Nitrogen-smart diet choices: Alternative protein sources
  - 2.3 Health effect of Nr losses in the food chain
  - 2.4 Policies and societal changes
- 3 PART 3: Making the case: nitrogen and food**
  - 3.1 Representative diet-pathways: the cost of unhealthy diets
  - 3.2 Healthy and nitrogen-smart: trade-off or win-win?
  - 3.3 Reduction of N pollution: improved supply versus changed demand

## Template for chapter presentations

Please give a [brief summary](#) of the work in your 'group', covering the following aspects:

- Slide 1: Objective, novel aspects of work, target (review paper, background document, original research paper, "summary-blocks", see [here for types of EPNF contributions](#)), main conclusions (if already available)
- Slide 2: Status, current outline, contributors, problems (if any)
- Slide 3: Timeline and coordination (needs) with other 'chapters'
- Slide 4: What is covered and what is *not* covered that would be required/good for the EPNF report (acc. to discussions in November and/or new ideas)
- Slide 5: General comments, missing elements in the EPNF outline/plan