

EPNF2 - 5th meeting - Minutes

Cercedilla 23-25 May 2018

The Expert Panel on Nitrogen and Food (EPNF, <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 the Parties of the Convention on the key questions around the topic of how current diets can be made more healthy and more sustainable. These key questions were 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](#)).

The EPNF met so far on four occasions, i.e. Paris (May 2016¹), Milan (November 2016²), Wageningen (June 2017³), and via webmeeting (December 2017⁴). During these meetings, much progress has been made to define the focus of the report and with the chapter/paper required to support the report with the latest scientific evidence. Objective of the fifth meeting was to update each other on the progress and challenges in each of the planned papers, and move ahead with the planning of the Special Issue.

The meeting was held as a combined physical and remote meeting, with about half of the participants connecting via webex. Meeting place for was the [Residence Lucas Olazabal](#) (Educational and residential center of the University of Madrid) in [Cercedilla, Madrid](#).

The meeting was designed in three parts:

1. Group meetings on specific papers
2. Plenary meeting presenting status quo and progress of the papers
3. Plenary meeting discussing the way forward for the special issue

The meeting included an optional trip to the organic goat farm [Suerte Ampanera](#) on the way back to Madrid.

Here, main conclusions and action points are listed. A brief summary of content, status and an assessment of ‘being on track’ for the planned background papers for the EPNF2 report (either as peer reviewed paper or as a report) is given in [Table 1](#). Overall the work is sufficiently on track in view of the current ambition to be ready for submission to a special issue in late-summer 2018, however, some papers are delayed and require increased efforts.

¹ http://www.clrtap-tfrn.org/sites/clrtap-tfrn.org/files/documents/EPNF2/EPNF2-1_minutes.pdf

² http://www.clrtap-tfrn.org/sites/clrtap-tfrn.org/files/documents/EPNF2/EPNF2-2_minutes_v2.pdf

³ http://www.clrtap-tfrn.org/sites/clrtap-tfrn.org/files/documents/EPNF2/20170621-2epnf2-3_minutes.pdf

⁴ http://www.clrtap-tfrn.org/sites/clrtap-tfrn.org/files/documents/EPNF2/201712epnf2-4_minutes.pdf

Actions and Decisions:

- ❑ **Special issue:** submission as Special Issue to Global Food Security; contact is already established, letter to editor needs to be circulated and sent soon.
 - ❑ Timeline remains as planned: submission period October 2018-February 2019, publication if possible autumn 2019
- ❑ **Next meetings:**
 - ❑ Individual papers continue to organize web meetings as necessary.
 - ❑ Next EPNF meeting not yet planned, depends on further progress

Table 1: Summary of planned (background) papers for the EPNF report [back](#)

Title	Content	Status	On track?
Wholesome food systems: integrating health and environment – Introduction	Introduction. Definition of food system approach used in this Special Issue	Initial idea	Yes as will be one of the last
The limits of food production NUE	Farm level NUEs embedded in SSP narratives, based on technology mixes	Paper strategy defined; characterization of farms for SSPs started.	Yes, but needs to keep up momentum.
Opportunities for food production in a zero-carbon society	Substitution land vs energy for food production based on LCA thinking; discussion of paradigm that agriculture ‘contributes’ to mitigation by delivering biofuels.	Initial literature review	Delay but not of concern yet
Future foods: towards a planet friendly diet for a growing population	Micro and macro-nutrients in alternative protein sources and corresponding environmental impact (land, energy, GHG)	Submitted Nature Sustainability	Finalized
Nitrogen use efficiency of black soldier fly production	Insects as potential future food; impact on food system as modelled with CAPRI	Data collection advanced.	Likely not part of the Special Issue
Unveiling the potential for circularity of nitrogen flows lost along the food supply and consumption chain	Opportunities provided by the circular economy within the food sector; comprehensive picture on how to enhance nitrogen circularity along the entire food production and consumption chain at the European level.	Data compilation and scope of paper finalized.	Yes
Low footprint healthy diets	Assessment of dietary guidelines on communication of EPNF-relevant issues (e.g.	Idea developed; material available.	Yes ?

	proteins, plant vs animal sourced food etc.)		
Dietary megatrends and storylines for future scenarios	Food and diet storylines for SSPs, focus on health and sustainability	Storylines done - part on drivers partly done; needs now input from wider group for finalization.	Yes
Diet models	Diet model based on Schoenefeld equation (as function of income and demography)	Models ready. Paper to be written.	Yes
Health effect of Nr losses to the atmosphere in the food chain	Review current state of knowledge on emissions, resulting pollutant levels and their impacts; identify knowledge gaps. (Assessment of health effect of scenarios to be discussed later)	Outline available; draft report foreseen for March 2018 (planned as JRC technical report, not peer reviewed paper)	Yes (not urgent)
Impact of Nr losses to water	Explore the effects on human health of nitrogen losses from the food chain to waters, under current conditions and future scenarios.	Content discussed, work will start once first simulation results are available.	Yes as can only 'start' later
Expanding horizons: policy opportunities to reduce nitrogen pollution along the agricultural value chain	Possible policy intervention for major value chain actors on the basis of examples (case studies) and development of criteria to assess effectiveness.	Submitted to Ambio	Finalized
Policies and interventions for a more sustainable food choice	Inventory of policies aiming at improving sustainability of consumer choices. Focus vegetable vs animal sourced proteins, household waste, obesity.	Draft paper available, literature review virtually done. Requires consolidation.	Yes
Closing the policy coherence gap to achieve sustainable and healthy food system in Europe	Understand and identify (policy related) best practices leading to sustainable and healthy Food System; define a CF to foster synergies and bridging policy coherency gaps; test CF at current implementation of innovative food system policy (empirical analysis)	Draft paper available; case study analyses progresses	Yes
Healthy and nitrogen-smart: trade-off or win-win?	Decided to skip.		Will not be done
Reduction of N pollution: improved supply versus changed demand	Identify the 'mitigation gap' to reach Nr and GHG mitigation target for a number of scenarios and their policy space with model simulations.	Discussions advanced, but actual work not yet started.	Delayed, but not yet of concern.

The cost of unhealthy diets	Extension of Oxford health model (age, physical activity); assessment of SSPs; comparison of costs linked to health outcomes from diet and pollution.	Idea and models developed. Work starts once CAPRI+MaGPIE results available.	Delayed, not yet of concern.
-----------------------------	---	---	------------------------------

AGENDA EPNF meeting Cercedilla - Madrid 23-25 May 2018 [back](#)

Date	Start	End	Type	Title
23/5/20218	08:30	08:45	Plenary	Welcome & introduction into the 'green menus' project of University of Madrid
23/5/20218	08:45	13:00	Group	"Policy transition"
23/5/20218	12:00	13:00	Group	"Model assessments"
23/5/20218	14:00	16:30	Group	"Consumer Policy"
23/5/20218	17:00	20:00	Optional	Hiking and group photo
23/5/20218	20:30		Dinner	
Day 2 - Thursday 24/05				
24/5/20218	08:30	12:30	Group	"Farm Level"
24/5/20218	08:30	12:30	Group	"Consumer Policy"
24/5/20218	13:30	15:30	Plenary	PART 2: Dietary megatrends and storylines for future scenarios
24/5/20218	15:30	15:40	Plenary	PART 1: The limits of food production NUE
24/5/20218	15:40	15:50	Plenary	PART 1: Do we really need land and sun for food production?
24/5/20218	15:50	16:00	Plenary	PART 1: Food losses and circular N flows in the post farm gate food chain
24/5/20218	16:30	16:40	Plenary	PART 2: Lower footprint healthy diets?
24/5/20218	16:40	16:50	Plenary	PART 1: Future foods: towards a planet friendly diet for a growing population
24/5/20218	16:50	17:00	Plenary	PART 1: Future foods - N aspects
24/5/20218	17:00	17:10	Plenary	PART 2: Expanding horizons: policy opportunities to reduce nitrogen pollution along the agricultural value chain
24/5/20218	17:10	17:20	Plenary	PART 2: Understanding policy and societal changes to promote transition towards sustainable and healthy agri-food system
24/5/20218	17:20	17:30	Plenary	PART 2: Mapping of policies for a more sustainable food choice
24/5/20218	17:30	17:40	Plenary	PART 2: Modelling future diets
24/5/20218	19:30		Dinner	
Day 3 - Friday 25/05				
25/5/20218	08:30	08:40	Plenary	PART 3: Healthy and nitrogen-smart: trade-off or win-win?
25/5/20218	08:40	08:50	Plenary	PART 3: Future challenges of EUs food system
25/5/20218	08:50	09:00	Plenary	PART 3: Representative diet-pathways: the cost of unhealthy diets
25/5/20218	09:00	09:10	Plenary	PART 3: Reduction of N pollution: improved supply versus changed demand
25/5/20218	09:10	09:20	Plenary	PART 3: Health effect of Nr losses to the atmosphere in the food chain
25/5/20218	09:20	09:30	Plenary	PART 3: Impact of Nr losses to water
25/5/20218	09:30	10:10	Plenary	Special issue: drafting of submission request: final list of papers, letter to editor, abstracts, authors, internal review
25/5/20218	10:10	10:40	Plenary	The Cercedilla Manifesto on Sustainable Conferences
25/5/20218	10:40	11:00	Plenary	Brainstorming 'what's next?' - Common projects?
25/5/20218	11:00	11:10	Plenary	AOB: next milestones, meetings, C&N neutrality, etc.
25/5/20218	11:30	15:30	Optional	Visit to Goat Farm 'Suerte Ampanera'