# **Expert Panel on Nitrogen Budgets**

Park Inn Pulkovskaya Hotel Saint Petersburg, March 2<sup>nd</sup> 2012, 9:00 a.m.

- 1. **Dynamic Tool National N budgets** (Jürg Heldstab and Adrian Leip: see presentation slides)
  - Introduction to the new tool, first applications, limitations and positive outcomes
  - Tool will be refined in the coming months to make it satisfactory
  - After that step the tool might get available for other countries (currently it is tuned for Switzerland)
  - Data requirement for the tool is high, it took about one year to get the data and do the calculations for Switzerland
  - EPNB wants to help countries in establishing national N budgets
  - Comment from Romania: it might be difficult for other countries than Switzerland to get the input data to do a national N budget; Wilfried agrees; tool is one first step, we must find a way that can be followed by other countries; we must decide which flows and input data are the most important

The EPNB appreciates the work on the dynamisation of the tool and is very much interested that the activities on the dynamic tool are going on. Until the next meeting, the tool is intended to further be developed (e.g., extension to transfer coefficients) and calibrated with the Swiss data 1994/2005/2020. Afterwards, the tool and its application option shall be documented (published) and shall be applied to other countries to simulate projections, scenarios or the effect of measures.

- 2. **N as a key environmental indicator** (OECD) Wilfried Winiwarter reporting back from interactions with OECD<sup>1</sup>
- See presentation Wilfried (note: there is only one presentation by Wilfried covering several topics)
- 3. Eurostat TF on Gross Nutrient Balances (Anne Miek Kremer)

<sup>1</sup> Note from Wilfried: OECD today (March 8) published an Invitation to Workshop on Environmental Indicators, 17-18 April 2012

- See presentation Anne Miek
- Eurostat is currently in a process of improving data collection
- At the end probably new legislation on additional mandatory data collection through national statistical offices
- Balances shall be estimated at national and regional level (not necessarily at farm level)
- Data on mineral fertiliser use will be required => data collection system will be implemented at NUTS 2 level; annual data collection; next step: national working groups will be established to get data in the short time, in the longer time farmer survey
- Manure production: shall be estimated by UFCCC methodology, tender on improving excretion coefficients will be launched
- · Manure processing shall be included
- Biological N fixation: short term country data, long term: evaluation of national data
- Crop and fodder and grassland production: update data (tender will be launched)
- Budgets are needed at a regional level, because many regulations (e.g. Nitrates Directive) work at a regional level
- Biggest improvement: get more detailed data at NUTS 2 level (storage, housing, application techniques, grazing) => data collection will be mandatory in EU 27 => questions will be an new Farm Structure Survey System
- European target value for N balance will not be set as the conditions in EU-27 are so different that a fair target value that applies to all EU 27 countries cannot be found
- 4. **Eurostat TF on Fertilizer Statistics & Working Group on Agro Environmental Indicators** (Alessandra De Marco and Anne Miek Kremer)

See presentation slides by Alessandra

- On the long term data collection of fertiliser use at farm level and at regional level shall be improved
- Create working groups at national level that will support the collection of the data
- If national data are not available use FAO data at the short term and get better data at the longer term
- Long term: all fertilisers (including manure): total use and pattern of use (which crop, when, which amount?)
- Problem: costs of data collection, avoid additional burden for statistical data collection to farmers

• Concern: will farmers really give the right numbers on fertiliser use in the light of legislation / regulation? => for this reason a national working group will be founded that checks the data given by the farmers (expert check, cross check with sales statistics)

# 5. **Proposed memorandum of understanding between EUROSTAT and TFRN or UNECE: EPNB's position** (Wilfried Winiwarter and Anne Miek Kremer)

- See presentation Wilfried
- MoU would simplify communication between Eurostat and EPNB
- Wilfried shows text proposal
- Comment from Natalya: for the ECCA countries it is likely to be more easy to cooperate with UECE and Eurostat that with their own national offices (statistics, ministry) => MoU should facilitate not only communication with European bodies, but also with ECCA country national bodies
- ECCA country representatives express their willingness to contribute and improve their budgets / data availability, but see difficulties in data availability, time and money
- It is agreed to go the way forward even if it was only in small steps
- Wilfried is willing to express the need of data collection and N budget improvement by a supporting letter to be made available to the ECCA country representatives upon request
- MoU means that activities should not be limited to EU 27 countries, but should be valid for all UNECE countries. EPNB agrees that Wilfried should proceed with this MoU and send it to EUROSTAT as well as the UNECE CLRTAP for comments.
- 6. **N budget guidance document: status and further development** (discussion facilitated by Wilfried Winiwarter)
- Need to provide an updated guidance document to the next WGSR (meeting end of April)
- Informal document is available, must be updated and turned into an official document
- Feedback on the document is due next week (7<sup>th</sup> March), revise by March 14<sup>th</sup>
- Goal: document shall contain a structure as a basis for further details

- Concept of N budget: use similar pools across UNECE, use pools and pool data that are already available
- Current document version provides the structure of pools, but a detailed description of pools needs further resources
- Wilfried asks participants to have a look at the document and send feedback (Wilfried will send the current version; it is also available from the TFRN website)
- Adrian has some detailed comments e.g. on the terminology and will send them by email
- Adrian would want to raise discussion on the suggested pools; Adrian suggests to split agricultural pools following the IPCC methodology
- Juerg: split list into compulsory boxes and voluntary more detailed structure
- Water: many countries will not be able to follow the currently proposed level of detail=> make less detail compulsory
- Water: check definition of inland water: does it include groundwater? Separation between inland water and ground water might not be possible in many countries
- Shabtai: move atmosphere to the bottom of the list
- Juerg: split waste into IPCC categories
- Wilfried: split under the sections, but not in the main categories listed at the beginning of the budget => the detailed description should contain description on splits that are harmonised with IPCC methodology
- Wilfried includes comments into draft during the discussion
- Wilfried will include additional comments into a draft that will be sent out at the weekend

## 7. National N budgets: new developments (AT: Barbara Amon and Wilfried Winiwarter; ...)

Due to time constaints, the presentation of Barbara on the upcoming project FarmClim covering agricultural N budgets and intervention points in Austria is made available as presentation slides only (see Barbara's slides)

#### 8. Farm N budgets

- TFRN continuously asks EPNB to work on farm level N balances
- Set of contacts is not complete
- Farm level N balances need to be more simple than the "Adrian model"
- Wilfried asks for contacts to the "Farm N balances community"

- Is there any standardisation of farm balances?
- Klaas: depends on the system boundaries that are taken, no agreement on the system boundaries, can be defined by everyone individually
- Barbara: send report of project "Nitrates Directive"
- Go through the current version of the Guidance document on ammonia mitigation
- Discussion continues under the presence of Mark Sutton
- Material on farm level balances in the Guidance document was written by Oene
- Currently: general guidance, but no "recipe book"
- If farm level balances become mandatory in the future, a development towards a recipe book might be required
- Next step: go through guidance document, get information on national documentation, get information on national tools
- Klaas will send information on the MENASSE system to Wilfried
- Jerome offers to prepare a simple excel sheet as a starting point for further development

#### 9. Explore collaboration with UNECE water convention

- Suggestion Mark: Give Francesca (water convention) an update of the meeting and asking for an update from her if they have made the decision of going further into agriculture
- TFRN is allowed to include water aspects

### 10. Workplan 2012 / 2013

- See presentation Wilfried
- Collaboration with OECD, Eurostat, MoU, Water Convention
- Liase with the Austrian research project FarmClim (high N use efficiency)
- Harmonisation of data collection
- Further support of national N budgets (e.g. dynamic tool)
- Decide on the when and where of the next meeting after the WGSR meeting end of April
- Adrian: suggests to have thematic workshop on farm balances in the Autumn in the UK along with the Food, Climate, LCA conference;
  invite additional agricultural experts for this workshop including EPNF
- Adrian: in October there will be a Food and Climate conference in France => please check and avoid clashes

#### 11. AOB

• Suggestion to name Adrian's model nutrient Buddy (budget dynamic)

Alternative: N soft

N buddy

- Attach presentation on FarmClim to the meeting notes
- Wilfried will create a link to a IIASA web page that is not accessible from outside where he will put the documents for download without password (as a response to some access problems)
- Russian –Austrian chocolate exchange

Rapporteur: Barbara Amon (finalized by Wilfried Winiwarter, March 8, 2012)