Present: Cecile, Anne-Marie, Stephan, Masaharu, Jane

Introduction: Sub-group on HH, not on generic framework and stress

Look at impact pathway on HH, with question being: where we should focus on midpoint.

- Paper in review by Boulay et al: looking at the figure for the general framework
- Generic pathway and 3 existing methods
- Midpoint there is m3 water unavailable to other users per m3 of water consumption
- Boulay et al includes functionality for users (domestic and agriculture/fisheries)
- Motoshita et al.: includes trade effects
- Jane: way of including agricultural deprivation also in developed countries

General points:
- Stephan: agree on framework but start on what is available not focus on work which cannot be done
- AMB: if the group can agree on what needs to be included and how, I can put it together.
- Cecile: Agrees, work on these issues identified as most important like done in USETOX

Where to stop at midpoint:
- Cecile: go further along the line since a generic stress will already probably be proposed. Not stop too early since this would not add a lot of information. Suggestion to go to endpoint and come back to a normalized midpoint.
- Relevance demands for more detailed assessment specific to HH
- Stephan agrees that we go further and main point is if want to include trade effects or not. Is this a way Jane agrees to include?
- Jane does not know the work. What is suggested by Cecile?
- Cecile wants to have normalized midpoints by different endpoints like done in Usetox regarding Ecotox and humantox
- AMB: weighting at pseudo midpoint might be critical; also regarding ISO, so if we go with a generic stress midpoint, it makes sense to have specific AoP indicators that are more than stress.
- Cecile: should be in line with other impact categories
- Stephan: here we would have different aspects within same impact categories and therefore it depends on if we are following different pathways (mechanisms) and then normalize and aggregate or maybe we can agree on a single cause-effect chain for HH and then no aggregation is required.
• Jane agrees on many points with Manueles email. WSI or water scarcity could be the midpoint for resources but for human health additional aspects might be included in impact assessment.

• AMB summarizes
  o Everyone agrees to go further than deprivation / WSI for the work so far, and we can decide later on where the midpoint is.
  o Cecile wants to go until endpoint but maybe we do stop before
  o Two aspects
    • Malnutrition
    • Domestic deprivation (different health aspects)
  o Jane: general midpoint should not go to endpoint and come back
    • Trusted midpoint lies close to simplified WSI including some human health aspects
    • e.g. US EPA supported midpoint due to high data uncertainties (less concern about model uncertainty)
    • -> calculating back from endpoint is not solving the problem
    • Jane thinks she is alone with this idea and does not feel strongly but for the US it will probably be focused on more midpoint.
    • Cecile: model vs, data uncertainty. e.g. stopping at midpoint for tox might be intake fraction
    • Jane: if you are excluding impact pathways you are recognizing this limitation. > more transparent
    • Stephan: optimize between model and data uncertainty
    • Jane
      • Anne-Marie mentioned at ILCD call about the problems with midpoint endpoint distinction and maybe to be discussed with them again
      • Masaharu: goals in each subgroup, Stress indicator group expects answer from this subgroup what to be included in the midpoint for stress sub-working group
      • Stephan: the group should collaborate and the specific working group (HH EQ) should also focus on full cause-effect chain in order to recommend "stress" group what elements to be included.
  o How to proceed from here
    • Share all materials (what is possible)?
    • Masaharu to present his work at the next meeting of this sub-working group
  o Jane: PhD on developing WSI
    • How does contribution of individuals treated? It might bot be a full group proposal (might be published anyway) and how is that separated from working contribution.
    • Problem also with committees
      Stephan: it is a relevant and we should clarify the issue of contributions. Best situation if PhD students are first and then we can refer to this
      • Cecile: Experience at CIRAIG. It was good experience. Other possible way; publish beside WULCA but share information and collaborate "on the side".
  o Jane : Main focus will be in midpoint

Next meeting in 3 or 4 weeks.

AMB: Do all agree that we focus on developing full pathway but might also suggest midpoint (either earlier on impact pathway of by normalizing endpoints). Exactly what the midpoint is will be decided in conjunction with the stress sub-group. Yes