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1412.10. These definitions of iota_1 and iota_2 should be moved to where the variables fare first introduced.       Thank you for the suggestion, we have moved this to the introduction of the fuzzy logical structure as presented in Table 1."         412.16. Applied fuzzification methods for each variable are motivated by scientific findings". This is vague. What "scientific findings"?       We suggest to rephrase this to "Applied fuzzification methods for each variable are motivated by results from literature as presented in Table 1."         414.1. "Thresholds iota_1, iota_2, as well as the shape of the membership function (Eq.1-4) to fuzzify each input dataset are motivated by relevant findings." Again, this T is to vague. If I wanted to apply this methodology, this sentence would not help me.       Appendix)."         419. I feel that the discussion of the relevance of uncertainty (an important point) is needlessly complicated. The basic idea is simple: if uncertainty in the best-estimate service are influential does not add to the argument, but rather detracts.       We have revised the paragraphs are motivated by results for more specific aspects which seem to complicated, we would be very grateful for more specific comments in this regard.         421.0. "The selection of indicators and data for the purpose of quantification focusses on a holistic representation of important aspects." Again, statements like this do nothing 10 advance the discussion.       We rephrased and reworked this paragraph in order to be more precise.         424.6. "Uncertainty has often been blamed for inaction in terms of climate mitigation 11 and adaptation." Please add a reference.       Reference added         12       We have checked all units and denominators and will make sure t	4	for example "sufficient water is available".' I find this sentence to be too simple, and also tautological (i.e. "sufficient" is a synonym for "adequate" here). Does "sufficient" mean "sufficient to drink"? Or "sufficient for subsistence agriculture"? Or "sufficient for non-native landscaping"? This sentence highlights the fundamental tension between the qualitative and the quantitative in this paper. A more sophisticated and precise treatment of this tension might be needed.	following Section 2.3. With regard to the tension of qualitative and quantitative aspects please refer to the general comments. We have added a more detailed outline of the conceptual basis of AHEAD in Section 2.1, also specifying more clearly what is meant by sufficient', as this is an aspect that relates to all elements, not only water. "For the purpose of measuring the fulfilment of AHEAD, we want to assess whether the availability of each element is adequate to meet human livelihood needs. Adequacy in this context refers to a situation, where elements are sufficiently available in quantity and quality to meet basic needs and permit a life in dignity (Wicks2012) as recognized for example in the Universal Declaration of Human Rights (BHR 1948). "
412.16. Applied fuzzification methods for each variable are motivated by scientific 6findings." This is vague. What "scientific findings"?       We suggest to rephrase this to "Applied fuzzification methods for each variable are motivated by results from literature as presented in Table 1." Changed to: "Thresholds Strota 128 stota 22, as well as the shape of the membership function (Eq. 1-4) to fuzzify each input dataset are motivated by relevant findings." Again, this 7 is too vague. If I wanted to apply this methodology, this sentence would not help me.       We have revised the paragraphs, are motivated by results from literature (for an overview of all membership function (Eq. 1-4) to fuzzify each input dataset, which are discussed in the following paragraphs, are motivated by results from literature (for an overview of all membership function (Eq. 1-4) to fuzzify each input dataset, which are discussed in the following functions as well as the frequency distribution of the input data see Figure A1, Appendix)."         419. I feel that the discussion of the relevance of uncertainty (an important point) is needlessly complicated. The basic idea is simple: if uncertainty in the best-estimate 8value causes it to cross a threshold, the uncertainty is relevant.       We have revised the paragraph to convey the main principle (which is clearly simple) first. Nonefheless, we feel that the detailed discussion of this aspect is relevant to the message of the paper. If there are specific aspectifs which seem to complicated, we would be very grateful for more specific comments in this regard.         421.10. "The selection of indicators and data for the purpose of quantification focusses on a holistic representation of important aspects." Again, statements like this do nothing 10 to advance the discussion.       We rephrased and reworked this paragraph in order to be more precise.      <		412.10. These definitions of iota_1 and iota_2 should be moved to where the variables	Thank you for the suggestion, we have moved this to the introduction of the fuzzy logic algorithm
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131 apie 1. Some explanation for "country-specific MDER" is needed.	12	to similar units within the table.)	proof-reding version. With regard to cancelling down , we have chosen the units of the original data publications.
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15 Fig. 5. I don't understand what the hatching signifies, "changes towards the 2090". precisely state the content.			precisely state the content.
Tables A1 and A2. It's not clear to me what these tables contribute to the paper. Con- 16sider explaining their significance in the captions. We have updated the captions and refer to these numbers explicitly in the extended results section. We have updated the captions and refer to these numbers explicitly in the extended results section.			results section.
17 Table 1. Font is too small. Please use multi-page table. on the format of the final paper).	17	Table 1. Font is too small. Please use multi-page table.	
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