

Review of resubmission - **The Use of Semi-Structured Interviews for the Characterisation of Farmer Irrigation Practices.** J. O'Keefe et al.

I have reviewed the revisions provided by the authors in response to the comments of 2 anonymous and 2 named referees.

I address the responses in turn:

**Referee 1**

S3.1.1 helps explain the method more fully in terms of the interview design and the supplementary information sets out the questions asked. S. 3.1.4 sets out inclusion/ exclusion criteria and s 3.1.5 follows through with the interview approach. This is a reasonably comprehensive description. The verification point remains live, but caveats have been provided ll 485-495 that embrace this point explicitly. I am satisfied that this goes sufficiently far to address the concerns expressed. ) S 4.3. The approach, combining modelled and field reported data, helps understanding of the issue and adds useful observations from climatic information. However, I was not happy with the both the content and layout of figure 7. I am not sure whether a comparison is possible between a modelled data series that ends in 2012 and field reported data for the following year, 2013. Were climate data not available to model 2013 as well? If these data can be included it would allow a direct comparison with the field data, but at the moment this is not possible. The figure itself needs a clean- up (e.g. a clear background, pref. no gridlines) and a (brief) better explanation (what do the components of the box and whisker plots mean, are they interquartile range and extremes?, etc. at editors discretion),

The inter-regional contrast in terms of model/ field data variation also merits perhaps a sentence or two more of comment.

3) The authors have set out uncertainties in more detail than in the previous version. While this section is useful, it might help also for the authors to set out whether the 'propensity to please' has been found in any previous studies and may be a culturally-specific phenomenon to either or both regions. Other than that, I feel this section addresses the reviewer's concerns.

4) See 2) above, which covers the same issue.

5) I'm satisfied that this new section adds a helpful amount of qualitative information and addresses the reviewer's concerns.

6) Agreed and this is also helpful additional material which addresses the concerns. Query necessity of use of colour in fig 3 and 4 - editor's discretion perhaps?. The green won't reproduce on a print palette very clearly and may end up masking the black circles

**Referee 2 –**

7) The new section referred to here is section 4.2, in which the qualitative information is set out. I examined this section carefully to see if the specific points raised by the reviewer were met. Although they are met in a largely qualitative sense, and I think the reviewer may be alluding to a need for more quantitative information to be elicited on payments and response to prices, I think on balance however this additional section meets the requirements set out by the reviewer.

8) The section 5 recommendations for future work are rather brief but sufficient in that they follow on from the description of the limitations of the work.

9) See response to reviewer in comment 3) above, which addresses this issue, in my view satisfactorily

10) See response to reviewer in comment 1) above, which, together with the supplemental information, addresses this issue satisfactorily.

11) See response to reviewer in comment 3) above, which addresses this issue, in my view, satisfactorily

12) Section 4.2 appears adequately to address the concerns raised here

13) Subject to the issues raised in my observations above on the response to reviewer 1 comment 2), the authors have responded to the points raised. There may however be scope to expand a little further on this particularly implications for hydrological modelling, climate change, etc., in section 5, (which as noted above is a little brief), by way of suggestions for further work.

#### **K. Waylen**

- Inappropriate reference to qualitative.

The authors have left this in. In my view it's a debate about semantics and not substance. I don't think the paper falls down on this basis. The new section sets out the interview findings. I can't see how this can be anything other than qualitative, so would struggle to suggest any alternative presentation. Reviewer accepts that revision of claims made would be sufficient and this is carried out through s.4.2.

- Sampling not aiming to achieve representativeness.

I think section 2.2 (and incidentally 2.3) are very general sections and do not set out methodology specific to the study. At very least, they need a good proof read for grammar (participants which – (who?)). S. 2.2. needs to set out exactly what 'purposive' means in this context and how participants were selected. If it was more opportunistic. I would suggest a way forward would be to integrate the general section s. 2.2 with the specifics of what was actually done in the study (s.3.1.1. to 3.1.4) to make an integrated methodology section that is clear on how the sampling was carried out and any issues of bias that could be raised.

- Reviewer suggests that this work should not be presented as qualitative.
  - See above
- Approach more consistent with quantitative positivistic sciences
  - Agree that this has been addressed – see above.
- Survey administered face to face = better description
  - – these seem like SSIs to me, based on the template the authors have provided.

- Care with claims made for methods/ limitations , individual impacts, characteristics of farms, etc.
  - This is addressed adequately in the revised draft s.4.2

#### **K. Holstead**

- **'Grounded theory'**
  - these concerns have been addressed by removal of reference to the term
- No room for new concepts / reference to coding
  - Agree that s. 4.2 addresses the issue raised here
- Reflexivity and Rationality
  - Agree that revised draft addresses these concerns.