Reviewer's report

Title: Assessing the Internal Validity of a Household Survey-Based Food Security Measure Adapted for Use in Iran

Version: 1 Date: 8 October 2008

Reviewer: Hugo R Melgar-Quinonez

Reviewer's report:

This is a concise and well written paper. The question posed by the authors can be characterized as new since it is addressed for the first time within the context of an Asian country. The question is well defined, and the methods used by the authors are appropriate and well described providing sufficient details, as well as supporting literature on the proposed methodology. Nevertheless sampling design needs to be described in a clearer manner (see below). The data are sound, and the manuscript adheres to the standards for reporting such scientific findings. The section “Results” needs to be revised. The discussion is adequate and supportive of the findings, but it is too succinct.

Minor Essential Revisions:

1. Although the question is clearly delimited, some brief description on the importance of the proposed tool for Iran would be helpful to highlight the importance of the proposed analysis. Is this the only tool available in Iran for the purposes of household food security measurement? Why do the authors propose the US tool?
   a. In the abstract the background is composed by only one line describing the objective of the paper.

2. The paper needs some minor editing correcting some errors in the writing. Following some examples, but I suggest a thorough review to correct such minor errors:
   a. page 4 line 3: space at )and
   b. page 5 line 14 space at ],Preliminary
   c. page 6 line 12 Principal instead of Princile

3. In the abstract and in page 5 line 2 authors state that “Data were provided by 2,004 households from clusters of all districts in Isfahan randomly during 2005”. The sentence is not clear, but probably what is intended to report is that “Data were provided by 2,004 randomly selected households...” Or do they mean: All 2,004 households located in randomly selected clusters...? The sampling design needs to be better described.

4. In table 1, questions are coded as AD1, AD2, etc., or CH1, CH2, etc. but in page 5 line 23 questions are coded A4b, A8b, and C5b.

5. Page 7, 1st paragraph basically repeats some numbers shown in table 2. It
can be written in a more concise way stating that as shown in table 2, the frequency of affirmative response to the items decreases as the severity of the underlying conditions increases.

6. Some statements in the results correspond in discussion section. The authors should limit the results section to presenting their findings without discissing or explaining them. Example: page 7 lines 21-26. This is a problem that repeats itself throughout this section: page 7 lines 16-17; 31-35; page 8: lines 5-15; 19-24; 27-33; page 9: lines 1-6; page 10: lines 5-9; 17-24.

7. The discussion section can be expanded moving some of the paragraphs discussing the results in the previous section. In addition, the authors make no mention on how their findings relate to similar studies in other countries. New literature is available on the use of Rasch Model to assess the performance of HH food security tools in other countries.

8. Tables 2 an 4 could be collapsed in one table using the same format used in table 1.

9. Superscript 2 in tables 3 and 5 is not described.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests