



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	Journal of Experimental Agriculture International
Manuscript Number:	Ms_JEAI_30689
Title of the Manuscript:	Factors influencing tomato farmers' perception of climate variability: evidence from the Offinso North District, Ghana
Type of Article:	Original Research Paper

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
As shown in the result (Table 4), the analytical tool employed is a multivariate choice model(Multinomial logit model) because it has three possible outcomes i.e Y1, Y2 and Y3 denoting changes in temperate, changes in rainfall pattern and change in intensity of solar radiation. It is no more a binary choice model (logit model). However, the argument I raised earlier was that perception is more than 'yes' or 'No' because there are several ways of perceiving changes which is regarded as perception indicators. These indicators can be converged using reduction analysis like factor analysis or principal component analysis and then fed into logit model and regressed against independent variables.	We appreciate your suggestion and perspective on the perception analysis, especially using a PCA and logit model. However, we also belong to the school of thought that perception can be binary in nature. Our position is evident in the literature where perception is analysed in binary form: that is either people perceive a change or do not perceive a change (e.g. Gunamantha et al., 2016; Ofoegbu et al., 2016; Amadou et al., 2015; Ndambiri et al., 2012 etc). So in this study perception of the various climatic variables were analysed in binary form where those who perceived a change was statistically coded 1 and those who did not perceive a change was coded 0. Taking a cue from your earlier suggestions, we splited climate variability into three dependent variables (changes in temperature, changes in rainfall pattern and changes in the intensity of solar radiation) by looking at each one as a binary variable against the various independent variables. Therefore we run three separate binary regression analyses as shown in Table 4. Though you see the three dependent variables (changes in temperature, changes in rainfall pattern and changes in the intensity of solar radiation) on the same table, they were separately analysed with their individual chi-square values under them as demonstrated in the table. We hope this explanation will help you understand our position as far as this paper is concerned as evident in perception literature. Thank you.