

### **Reply to Invited Reader Comment:**

We would like to say thank you to the invited reader for sharing his/her invaluable comments with us.

#### General comments

1. This is very relevant in response to the critical development challenges that confronts China as one of the aggressively emerging economies in the World:

***Thank you for your appreciation of our effort in linking one of the most important issues that China faces on its way of development, food security, with climate change;***

2. Very few typographical errors cut across a few sub-sections of the article, for instance, A slight error on page 11: 'important' instead of 'importance':

***Thank for identifying these typos which were transparent to the eyes of the authors. In addition to the instance of "importance" on p11 as you indicated, we also found "price increase" mistyped as "price crease" on p33, "greenhouse gas" mistyped as "greenhouse has" on p39, etc. during yet another check of the manuscript. We'll make sure all such errors are corrected at submission of a revision;***

#### Introduction

1. This section is good. It appears that the following statement on page 7 needs to be revised: 'The differences across models are why policymakers must avoid seeking specific solutions for specific locations.'

***Agree. The sentence will be revised as 'The differences across models observed here explain are why policymakers must avoid seeking specific solutions for specific locations.'***

#### Literature Review

1. The authors would have consulted some literature in the process of developing the paper, though there was no specific section of the paper that was allocated to 'literature review':

***Yes, we have consulted quite some publications, and made references to 67 of them. The literature was dispersed across the text rather than centralized in a 'literature review' section, which we thought may better serve the discussion of the topic.***

#### Methodology

1. The methodology adopted by the authors is okay. It forms the basis for the policy recommendations that are articulated in the paper:

***We are happy to hear this comment of yours on our method. Thank you.***

#### Results

1. The section on policy implication has to be well gleaned out. Lumping policy recommendations together with the conclusion may not bring out very clearly the policy implications of the issue at hand:

***We appreciate your clear indication of improvement to the manuscript at this point. We will surely consider making the policy implications stand out from the conclusions.***

#### Discussion, Conclusions and Policy Implications

1. What is the sex composition of the labour force and the likely threat that this portends for food security?

***According to the latest population census, the sex ratio (male to female) of the Chinese population was measured at 118:100 in 2010, rising from 116:100 in 2000, both of which are significantly higher than the natural ratio of 105:100. Researchers estimate that the sex ratio of the labor force would be at least 120:100 as the national average, suggesting that this ratio can be even higher for the rural population. Although "women in agriculture" is commonly observed, food harvests in recent years do not show evidence of negative impact. The lack of impact can partially be explained by the regular rushing back of the male migrants from their urban working grounds at, e.g., the critical harvesting/sowing times, to provide help. However, the implications of this sex disparity on the rural vulnerable group's affordability of and access to nutritious food deserve extra attention.***

2. The policy recommendations do not seem to reflect the evident disparities in the regional and provincial-level capacities:

***Agree. Policy recommendations will be fine-tuned to accommodate regional disparities in the revised version.***

#### Others

1. The authors need to adequately capture the implication of the aging population in China. It is not enough to discuss the declining population and the favorable food security policy implication of the 'one-child policy'. What implication does this have on the labour force in China?

***We do agree on this point. We'll try to combine it with the previous point of sex disparity into the discussion of their potential impacts on food security in China.***

#### Recommendation

Requires minor corrections.

***The authors will be happy to correct and/or revise the manuscript by taking full consideration of your comments. Thank you!***

The Authors

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