**Dear Editors:**

First we would like to thank you and the three reviewers for their careful read of our article and very helpful comments and suggestions. We believe that in the process of thinking and addressing them we have a better article. Below please find our detailed response to reviewers.

**Reviewer A:** (signed, Jose A. Marengo)

The paper is very well written, clear, easy to understand and certainly extremely relevant to the subject of climate change and adaptation.

I have some comments that can be considered as minor:

1. recommendations to ensure the scientific and technical quality of the manuscript, including figures;

Perhaps my most important comment is on the boxes, there is a need for a box for Africa, and a better connection between the boxes and the main text. I do not see much reference to them in the main text.

**Response**: we have added a box focusing on Africa (poverty traps and drought in Ethiopia) and believe it enhances and nicely illustrate our main theoretical argument in the paper.

1. the relevance and importance of the identified priorities;

The priorities are fine, may be there should be a differentiation between the case studies in the boxes and the idea of AC. AC may be considered in different ways in Africa, Asia and South America, and even inside South America they may be a different AC for NE Brazil and southern Brazil. Some of the considerations seem to be “academic”, and perhaps there is a need to define AC in the various contexts in less developed countries (inside the developed countries) and the way developed countries see AC in less developed countries.

**Response**: while the way AC realizes in different contexts maybe markedly different, we argue that the idea of generic vs. specific AC as an analytical framework is generalizable. However the reviewer has a point and we make note that determinants and potentially relationships between GAC and SAC maybe very different in different contexts (p. 6).

1. the clarity of recommendations and priorities to the international climate research community;

The paper works mostly with water ad extremes, but I would like to see some comments on warming or sea level rise, or hurricanes in Central America.

**Response**: We agree with the reviewer and did mention severe storms and sea level rise as stressors (see for example the Bangladesh box) but in the interest of brevity, we refrained from adding many more examples since the text is even longer now with the inclusion of a third box (see above) and additional material to address reviewers’ comments.

1. the proper attention to required international coordination and integration mechanisms;

I see this aspect well discussed, in a general way, perhaps some details is needed for the case studies included on the box, since each less developed country may treat AC in different ways, and this would be important in defining international integration mechanisms

Response: we agree with the reviewer this is a very important point but it might be beyond the scope of the article in its present focus. In addition, treating the issue right, would require a much lengthier discussion.

1. the overall readability and appeal of the article; and

It is excellent

1. additional comments and suggestions.

No additional comments

**Reviewer B:**

This is a well written and (mostly) well organized paper that addresses a topic of growing scholarly and policy concern to the international climate change community: the relationship between ongoing development programs and goals, and those specific to climate change adaptation. In doing so it focuses on two main scales of analysis – the national and the household/community level – and articulates two novel conceptual frameworks to address this relationship, *adaptive development*, and *specific and generic adaptive capacity*, respectively.

Of particular importance, is the paper’s contention that we need to think much more about the relationship between 1) specific adaptive capacity, 2) generic adaptive capacity, and 3) adaptive development. To not do so, is to risk these three interventions cancelling each other out or worse, that they result in undermining adaptive capacity for the most marginal (a process that is often hidden through short term coping strategies). The case studies are well selected and exemplify the paper’s main problematic well for the most part: I provide some specific comments below.

Before detailing these, I have three main suggestions:

**First**, space permitting, I would like to see one more Boxed Case Study to further exemplify either **1)** the relationship between short term but institutionalized state-led relief programs (NREGA in India, would serve as an excellent example) and adaptive capacity building to address more fully whether these ‘maintain or improve over people’s original state’ (p. 11) and/or whether these programs would allow the most marginal to build the assets necessary to access some forms of AC (e.g. crop insurance), or **2)** the relationship between the many non-state actors (NGOs, development donor agencies), their specific development programs and overall agendas (such as liberalization), and state led development programs and AC.

**Response**: see response to reviewer 1. We included a box focusing on poverty traps and long-term adaptive capacity in Africa that we believe nicely addresses the first part of the reviewer’s suggestion. We wish we would have the space to address the second point as well since we believe is an important point. However the article is already quite long and engaging it this discussion would require an even lengthier discussion.

**Second**, the paper uses the term *system* throughout the paper very unproblematically (particularly vis-a-vis postdevelopment critiques) to implicitly describe socioecological processes. For instance, on page 5 the authors write “the more adaptive capacity within a system the greater the likelihood that the system will be resilient in the face of climate stress”. Notwithstanding the tautological aspects of this sentence, what is a system? Is it generalizable? Is it specific? In what is it grounded? I had a chance to meet with Elinor Ostrom recently. She was discussing her social-ecological systems approach, where she detailed a large number of case studies that were performed throughout the world. She concluded that they still have not yet arrived at generalizable system within resource dependent communities (in these cases irrigators). Some general conceptual lessons were learned, yes, but not a *system*. It seems to me the metaphor of a system breaks down in a number of ways particularly at the household/community/meso level. Fleshing this out it particularly important since the paper is trying to make a policy argument. How do we deal local heterogeneity and entrenched local social power relations (in a way that does say ‘yes it is important’ and then moves on)?

**Response**: we agree with the reviewer and revised the use of the term *system* all over the text and made changes to address the reviewer’s comment where needed.

**Third**, the paper does not tread into the political economy of the state, the political economy of the region, the political economy of the community/household or the political economies of development donor agencies. “Causal” processes that mediate vulnerability and adaptive capacity are brought up only on page 9, while the introductory paragraph stresses the ‘need to better understand the factors that increase or constrain adaptive capacity’. Causal processes and ‘these factors’ signal political economy. The paper would be strengthened if authors dealt with this in a more robust way. In other words, adaptive capacity, adaptive development and *system* need some fleshing out through a critical lens, at whichever scale we are talking about.

**Response**: we agree with the reviewer and have added discussion and references boosting the political economy discussion throughout the paper. We believe the changes have improved the discussion.

I think it is clear that this piece should be published. It is of high scientific and technical quality. Its arguments are well reasoned and of immediate importance to global climate change research and policy-making. The article is well written, the figures are well done and useful in exemplifying the arguments. I am looking forward to learning what the authors do with the comments provided here and to ultimately seeing the paper in print.

Specific comments:

1. Page 2, first para: What can we expect given the past history of development interventions' uneven and unintended outcomes? How is participation imagined here?
2. Page 2, bottom: we might think here about how to adapt to adaptation interventions.
3. Page 3, first para: the political economy of development interventions is moving in an opposite direction: adaptive capacity building is individuated and financialized (e.g. microlending). Can this be addressed?
4. Page 3, bottom: “livelihood framework” is newly introduced. What is meant by this?
5. Page 4: this discussion of ‘coping’ compared to long-term AC is excellent and very clear.
6. Page 5, middle: what is the *system*? Resource-use system? Political economic system? Is there a system? "Adaptive capacity within a system" - isn't the system itself an adaptive network of sorts? Who are the actors that constitute the system (human, non-human)?
7. Page 5, bottom: this is a very long paragraph in which it is easy to get lost in the point of it. The section begins with the 'determinants of adaptive capacity' and then transitions to them being systemic in some way. This is set up to make the argument that we need to improve our understanding (via empirical investigations) of what builds, blocks or undermines adaptive capacity. This is a strong argument. I suggest breaking this para up to focus on these different problematics with building a robust understanding adaptive capacity over different temporal and spatial scales, within particular political, soical, economic and ecological contexts. Hopefully we will get to the generalizable moment, here? If these aspects make the system and the system is made of up of these aspects, then is this section not a little tautological?
8. Section 3, first para: This opening sentence seems out of place. It reads more like an introduction to a paper.
9. Box 1: the two sentences beginning with Bangladesh population (end para 1), seem out of place. Why is pop density important here? The assumption is that it is, but how is it related to AC? Also, further down: trade liberalization typically does not lead to enhancement of AC. Discuss? The growth in caloric deficits has occurred in India too and has been tied to trade liberalization, which has led to an increase in food commodity exports and more violent price fluctuations for staples (e.g. wheat). There is a need in this Box for a political economic critique. Also it seems that there needs to be a discussion or at least mention of BRAC, which is arguably more powerful than the state…or is a de facto state in Bangladesh.
10. Page 8, bottom: what is meant by *avatars*?
11. Page 9: What about Agrawal's previous work on vulnerability at various scales (which is cited, but has more lessons). I am thinking here that community level adaptive development is particularly relevant. It would be worthwhile to think more critically here about the scale or scale's of interventions in what the authors are proposing, moving beyond the state/local. How does individual AC relate to community AC (and perhaps regional stability)?
12. Page 9, This integration and possible conflict between development programs is key of course.
13. Page 9: Will the notions of risk, processes/strategies/mechanisms for creating adaptive capacity differ between planners and resource dependent communities? Previous scholarship indicates that it will. How will this be tackled?
14. Page 9, last para: How is "causal relationship", being thought about here?
15. Page 12: Who are the policy makers in this regard? Tend to focus on the state as making policy but the reality is that NGOs are doing much of this work by default with various projects, say for microcredit or other forms of capacity building (‘The will to Improve’ or BRAC). But it is disconnected from broader policy shifts, per se. E.g., NREGA in India?
16. Box 2 and Figure 2 are helpful and nicely done.

**Response**: Thank you the reviewer for the careful read and helpful specific suggestions. We addressed most of them (2, 4-14) by changing and adding to the text. The remaining suggestions, although relevant to the article, would require considerable more research (e.g. the role of NGOs) and lengthier discussions. We have however taken them to heart and will take them into consideration as our theoretical and empirical research into these issues goes on.

**Reviewer C:**

This article is better than excellent. It would be difficult to improve on it -- other than some good copy editing.

1. The paper makes a great contribution by locating adaptive capacity within the vulnerability literature and by further locating it as an internal function of the individual and household as well as a function of broader social and political economic structure -- what they called specific capacities and political economic structures.

2. The paper does a great job of taking the debate from adaptation as an isolated factor linked directly to climate stress and placing it in the broader context of development.

3. The paper is well grounded in the broad literature. It cites a wide swath of the literature -- although I would say it misses a large portion of the existing and very rich vulnerability/political economy literature that also squarely locates vulnerability reduction (adaptation) in household and structural factors. A deeper treatment of that literature would strengthen this paper.

4. It is rigorously argued and well illustrated with excellent case material.

5. I would publish as is.

Response: we appreciate the reviewer’s comments! We have also carried out some serious copy-editing and hopefully have eliminated redundancy and repetition.