

## Review of: "Weathering changes – livelihood adaptation to weather shocks in rural India by disadvantaged social groups"

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Potential competing interests: No potential competing interests to declare.

I specialize in exploring the qualitative dimensions of climate change, and my focus revolves around studying the intricate qualitative nature of this complex phenomenon. Consequently, I provide feedback exclusively on the qualitative and "conceptual" aspects of this manuscript. I can see that some reviewers have already addressed the "quantitative" dimension of the manuscript. Therefore, I recommend that the author considers incorporating their suggestions concerning quantitative aspects.

Now coming to my comments and suggestions.

- i. I find that this paper is well written, organized, and maintains a clear focus. Hence, it holds promise for publication. However, there exist a few minor matters that require rectification, along with a need for the author/s to address certain questions for further clarification.
- ii. The entire manuscript talks about the slow onset of climate change. But the title carries "weathering changes" and "weather shocks." I think either the title can also be "slow onset events of climate change" OR if the author wishes to go forward with the present title, the author has to provide a small justification in the manuscript, stating how the term "slow-onset events of climate change" conceptualized in this manuscript. The author has already referred to German Watch work. I wonder how the author missed this paper from German Watch: "Slow-onset Processes and Resulting Loss and Damage An introduction" <a href="https://www.germanwatch.org/en/19796">https://www.germanwatch.org/en/19796</a>
- iii. India has several social groups that were either historically excluded from its development process or for whom the development process remained distant because of their remote location. The Scheduled Castes are those who have been historically segregated primarily by occupational opportunities. They suffer diverse types of exclusion, but their occupational segregation affects their economic conditions the most. The Scheduled Tribes are those who mainly live off natural resources whose livelihood is often threatened by encroachment from the rest of the society. The Indian constitution recognizes 1108 different castes and 754 different tribes. These groups are quite heterogeneous in their composition but are very similar in their disadvantages. The Scheduled groups have the highest incidence of poverty in India along with a low measure of health and human capital. Several affirmative action policies have reduced discrimination substantially (e.g., in access to public education or employment), but they are hardly enough to counter centuries of exclusion. Membership of such groups is considered one of the primary risk factors for being poor in rural India. According to the 2011 Census, SCs and STs comprised 16.2 and 8.2 percent of the population respectively yet accounted for 40.6 percent of the poor in the 2004/2005 household expenditure survey. --- This paragraph



necessitates the inclusion of some citations and references to support the data and points being made. Additionally, it's important to acknowledge that social exclusion in India has been a longstanding issue influenced by multiple factors beyond just occupation and location. The author should provide a concise overview of the caste system and its role in perpetuating social exclusion. To discuss this further, the author may refer to the works by Dr. Sukhadeo Thorat which could provide valuable insights.

- iv. I've observed that the author employs the terms "disadvantaged social groups" and "socially excluded groups" interchangeably. However, these terms hold distinct connotations in the Indian context. To ensure clarity and consistency throughout the manuscript, the author should opt for a single term and adhere to it consistently. The author employs the term "Scheduled Groups" to encompass both "Scheduled Castes" and "Scheduled Tribes." This usage can be complex and unsuitable within the Indian context. I suggest considering the use of "Scheduled Castes" and "Scheduled Tribes" separately for clearer articulation. Alternatively, if the author opts to retain the collective term, acknowledging the conceptual complexity in an endnote would a right thing.
- v. Also, I am surprised how the author failed to refer to the works of migration by Dr. S. Irudaya Rajan.

  https://scholar.google.com/citations?user=Ks6HeZ8AAAAJ Dr. S. Irudaya Rajan and his colleagues have notably contributed several recent papers (mostly, book chapters), focusing on climate migration in India. Rather than relying on previous works on migration in various global regions, it is advisable to cite Dr. Rajan's works on migration. These works hold significant relevance to the present manuscript and can provide a more contextually fitting perspective on the subject matter.
- vi. Some statements like this require revision and recent citations: In India, migrants are less likely to be members of Scheduled groups (Hnatkovska and Lahiri, 2015; Bhattacharya, 2002; Deshingkar and Start, 2003; Mosse 2010). This is not only because of the higher incidence of poverty among them but also the discrimination faced by migrants and those belonging to disadvantaged groups. There are many recent studies that show that the migration rate among the Scheduled Caste Populations have become intense in recent years, particularly over the past one to two decades. The authors should refer to that as well.
- vii. I suggest the author provide essential details about the nature of the data that was utilized. The author mentions using data from two waves of IHDS in the paper. However, it is necessary to clarify what this data entails, including its geographical coverage (specific states), the period when the data was collected, its overall scope, and any other pertinent information. This clarity is particularly crucial for non-Indian researchers who may find it challenging to comprehend the data's focus without these foundational details. Providing this fundamental information at the outset of the paper would be beneficial.
- viii. The conclusion section of the paper is comprehensive and effectively summarizes the findings while also presenting valuable insights. A suggestion to enhance the conclusion is for the author to reference recent research conducted within India on the topic of migration, rather than relying solely on studies from various regions worldwide. Given that the paper's scope is confined to India, its migration phenomenon is distinctly influenced by unique social and economic factors. As a result, the author could consider omitting excessive references from other regions and including more references focused on India. This adjustment would bolster the paper's arguments and overall coherence.

