

## ***Interactive comment on “Land use and land cover change analysis of District Charsadda, Pakistan along Kabul River in 2010 flood: using an advance geographic information system and remote sensing techniques” by Misbah Fida et al.***

**Misbah Fida et al.**

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### General Comments:

We would like to thank and appreciate the reviewer for the time and effort he/she put to review our manuscript. We believed that the comments from the reviewer make considerable improvements in our work. During the revision, we will carefully address the suggestions and the recommendations raised by the reviewer during the open discussion.

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### Specific Comments:

Comment: Some abbreviations need to fully explain like GIS (Geographic Information System), RS (Remote Sensing) KPK (?).

Reply: As we have already mentioned in the Study Area about the KPK. L 100: The study area is located in the Khyber Pakhtunkhwa (KPK) province of Pakistan (Fig. 1).

Comment: Methods are valid and reliable but need more theoretical background about image processing and image acquisition apparently few or no reference is included in this section.

Reply: In the image processing and the Image acquisition section we wrote what we did during our work step-wise. We only explained our methodology and steps of data acquisition and processing. But as per your suggestion, we will add some references with details.

Comment: Please cite the software you use.

Reply: Well, we will add the citation of all the softwares we used in our study.

Comment: The results need more statistical analysis and visualization about the pre and post-flood comparison you can use also as a variable how local weather affects land usage (if the local weather is the same pre and post-flood).

Reply: As we have already mentioned the percentage change of the pre and post-flood both in terms of statistical analysis (percentage change), see (Table 1), and visually (see figure 6 and 7). As per your suggestion, we will add some more detail about this.

Comment: Please fix the figures that seem distorted.

Reply: Well, we will make the image (mentioned in the manuscript) more clear.