|  |  |
| --- | --- |
|  | |
| Book Name: | [**Geography, Earth Science and Environment: Research Highlights**](https://www.bookpi.org/bookstore/product/geography-earth-science-and-environment-research-highlights-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_4831** |
| Title of the Manuscript: | **Recharge site delineation through integrated geophysical hydrological and GIS approach – A basic understanding with case studies from Indian sub-continent** |
| Type of the Article | **Book Chapter** |

**Special note:**

**A research paper already published in a journal can be published as a Book Chapter in an expanded form with proper copyright approval.**

**Source Article:**

**This chapter is an extended version of the article published by the same author(s) in the following journal.**

**Groundwater for Sustainable Development, Volume 10, April 2020, 100343.**

**Available:** [**https://doi.org/10.1016/j.gsd.2020.100343**](https://doi.org/10.1016/j.gsd.2020.100343)

|  |  |  |
| --- | --- | --- |
| PART 1: Comments | | |
|  | Reviewer’s comment **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | This manuscript is significantly important to the scientific community as it provides a practical research for addressing groundwater scarcity and quality issues through an integrated geophysical, hydrological, and GIS approach. By showcasing real-world case studies—such as fluoride dilution in Nalgonda and agricultural enhancement in Ujjain—it highlights the effectiveness of artificial recharge strategies in water-stressed regions like India. The study covers the gap between the theoretical hydrogeology and real-world application by incorporating advanced tools like electrical resistivity surveys and remote sensing, ensuring data-driven site selection for recharge interventions. Furthermore, its findings hold global relevance, encouraging researchers worldwide to adapt and refine these methodologies to suit local geological conditions, thereby contributing to sustainable groundwater management at an international scale. |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | The title is generally suitable as it captures the essence of the article’s purpose, methodology, and regional focus. However, it can be changed to the following titles which sounds better:  **Delineating Groundwater Recharge Sites Using an Integrated Geophysical, Hydrological, and GIS Approach: Case Studies from India**  **Sustainable Groundwater Recharge: Integrated Geophysical and GIS Techniques for Site Selection in India** |  |
| Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here. | * Include at least one quantifiable result from the case studies to make the impact clearer * Make the abstract more concise by removing redundant phrases and rewording certain parts for better readability. |  |
| **Is the manuscript scientifically, correct? Please write here.** | * The English language must be well revised in the manuscript * The manuscript does not explicitly discuss uncertainties in resistivity measurements, hydrological estimates, or GIS-based mapping. * Suggestion: A brief section acknowledging data limitations, measurement errors, and hydrogeological variability would make the study more transparent. * The manuscript presents artificial recharge as an effective strategy but does not analyze long-term sustainability (e.g., risks of clogging, sedimentation, or decline in recharge rates over multiple years). |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** | Many of the cited references are very old old. Please try to cite some new references related to the research |  |
| Is the language/English quality of the article suitable for scholarly communications? | The English language quality is marginally suitable but requires significant revision to meet rigorous scholarly standards. Professional editing or co-author review could address these deficiencies, ensuring the manuscript communicates its valuable findings with the clarity and professionalism expected in scientific literature. |  |
| Optional/General comments |  |  |

|  |  |  |
| --- | --- | --- |
| **PART 2:** | | |
|  | Reviewer’s comment | Author’s comment *(if agreed with the reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **Are there ethical issues in this manuscript?** | *(If yes, Kindly please write down the ethical issues here in detail)* |  |

**Reviewers:**

**Hesham Ezz, Egypt**