**INSTRUCTIONS TO AUTHOR FOR PAKISTAN GEOGRAPHICAL REVIEW**

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**ABSTRACT**

The abstract is a succinct summary of why and how the work was done, the salient results, and their interpretation and broader implications, and should not exceed 250 words. The key words should be limited in 5 words and separated by comma. References should not be cited in the abstract. All pages of text, figures and tables should be numbered.

**KEYWORDS:** Pakistan, Geographical, Review, Lahore

**INTRODUCTION**

The Pakistan Geographical Review welcomes original papers under the scope of Geography relating to the earth, oceans, atmosphere, and space, and the processing, interpretation, and distribution of information data collected by remote sensing. In general PGR considers only original papers, and accepts manuscripts for review with the understanding that the same work has not been published. Submitted manuscripts should be not under consideration elsewhere for publication and will not be submitted elsewhere while under consideration by PGR. Submitted manuscripts should contain previously unreported material. Any overlap of contents between related papers should be minimal, and normally confined to the introductory section. However, papers previously presented in conference proceedings of limited circulation may be judged eligible for publication in revised form.

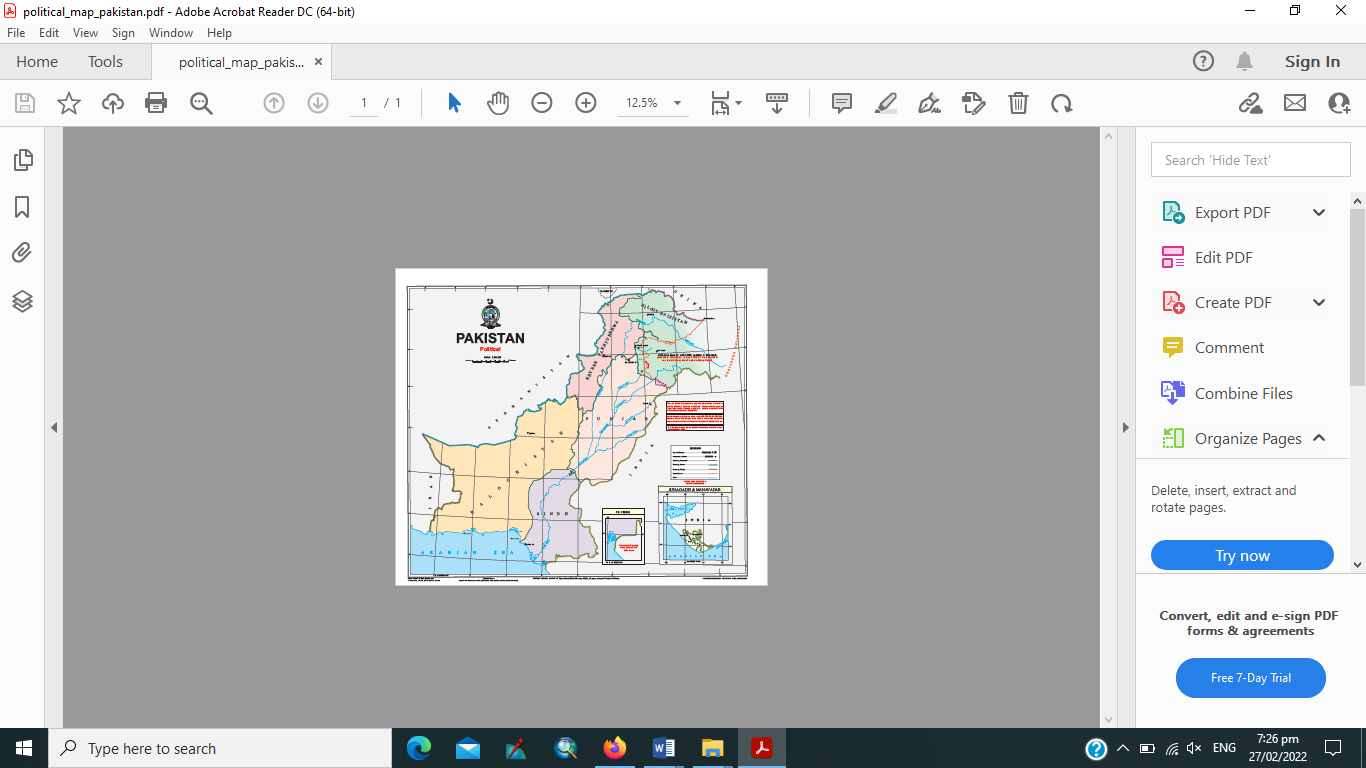
**Table 1: The declining rate of water table in Lahore**

|  |  |  |
| --- | --- | --- |
| Period | Average Rate of Water Table Decline in Lahore | |
| **ft/year** | **m/year** |
| 1967-1973 | 1.804 | 0.55 |
| 1973-1980 | 1.969 | 0.60 |
| 1980-2000 | 2.133 | 0.65 |
| 2007-2011 | 2.6 | 0.792 |
| 2011-2013 | 3 | 0.9144 |

**Source:** GoP, 2015

**Study Area**

Lahore is the major educational centre in Pakistan, the literacy rate of Lahore is 74%. Lahore is famous for educational institutes (Pakistan Statistical Year book 2007). Thousands of students have been migrated to this city for educational purposes annually. Thus, increased the population in Lahore city, which is semi-arid area of the Punjab.



**Fig. 1 Map Showing Study Area Pakistan**

**MATERIAL AND MEATHODS**

Primary data is used satellite image of quick bird. Area of the roof has been calculating after completing the digitization and area maps are generated latter on.

To estimate RWHP the area of rooftops is needed to calculate. Because rooftops are the runoff catchment area from where rainwater can be collected therefore in order, to find out area. College are digitized and calculated by using ArcMap 10.5.

**Table 2: Runoff coefficient factors for several type catchments**

|  |  |
| --- | --- |
| Type of Catchment | Coefficients |
| Bricks  Sheets of corrugated metal | 0.8 – 0.9  0.7 – ­0.9 |
| Concrete  Pavement of brick | 0.6 – 0.8  0.5 – 0.6 |
| Untreated ground catchments  Soil on slops less than 10% Rocky natural catchments | 0.0 – 0.3  0.2 – 0.5 |

**Source:** Pacey & Cullis (1989).

**RESULTS AND DISCUSSION**

Thecalculated study area is 82098 square meters. For accomplishing the resultant area measurement, all the rooftops of college buildings were digitized. Which later on, is followed by calculate estimated amount of rainwater harvesting potential (RWHP) in GIS system with addition of query.

**CONCLUSION**

A single step to conserve water is the step to secure our future. The RWH system utilities and advantages belong to everyone. It is sustainable and environmental friendly method of conserving water. Hence, there is a need of some strategic plan to develop RWH system at institute level.

**REFERENCES**

Each reference must be cited in the text, using the surnames of the authors and the year, for example, (Lee, 1991) or Lee and Kim (1999). Depending on the sentence construction, the names may or may not be in parentheses, but the year always is. If there are three or more authors, the citation should give the name of the first author followed by *et al.* (Lee *et al.,* 1994). If references occur that are not uniquely identified by the authors’ names and year, use a, b, c, etc., after the year, for example, Lee and Kim 1993a, 1993b, for the text citation and in the reference list.

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References must be listed in alphabetical order according to the name of the first author and not numbered and must be the following style.

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