

This is a report from the IPCC's Fifth Assessment on observed and projected impacts of climate change, vulnerability, adaptation, and mitigation globally. It assesses risks across sectors and regions and evaluates adaptation options for building resilience.

For South Asia including Pakistan, the report identifies increased riverine, coastal, and urban flooding leading to infrastructure damage and settlement disruption as a key risk. It also projects risk to health and food security from extreme heat and drought related water shortage.

The findings did not really surprise me as Pakistan has already been facing increased flooding, glacier melt, and extreme heat waves which are projected to become more intense with climate change. However, the scale of future risks highlighted in the report emphasizes the urgency of adaptation efforts.

Proposed adaptation measures for Pakistan include flood protection infrastructure like embankments; early warning systems for heat waves and infectious diseases; initiatives to enhance food security through drought resilient crop varieties and efficient irrigation; and urban planning to reduce urban heat island effects.

In my opinion, enhancing food and water security should be the priority for Pakistan. Developing heat and drought tolerant crop varieties can help farmers maintain yields amidst climate extremes. Upgrading irrigation infrastructure is also critical for agricultural production.

Two steps I could take are: saving water in my daily activities and encouraging others to do so as well, as water will become even more scarce in the future; and supporting local tree planting initiatives and climate change awareness campaigns to promote mitigation action across communities. Public education and engagement on climate risks and solutions is essential.

Doršner, K. (2020). Essentials of environmental science. Retrieved from [https://my.uopeople.edu/pluginfile.php/1096419/mod\\_book/chapter/266752/Essentials%20of%20Environmental%20Science2\\_Optimized.pdf](https://my.uopeople.edu/pluginfile.php/1096419/mod_book/chapter/266752/Essentials%20of%20Environmental%20Science2_Optimized.pdf)

IPCC, 2014: Summary for policymakers. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1-32