

Compatibility with Environmental Changes

In an important scientific analysis for environmental changes on earth the surface coverage over oceans and remote areas has been noted to be relatively sparse, but, reducing reliance on interpolation, satellite clouds and precipitation data has been available since the 1970s¹. Quantification of climatological variation of precipitation in prior centuries and epochs is less complete but approximated using proxies such as marine sediments, ice cores, cave stalagmites, and tree rings².

Climatological temperatures substantially affect cloud cover and precipitation. For instance, during the Last Glacial Maximum of 18,000 years ago, thermal-driven evaporation from the oceans onto continental landmasses was low, causing large areas of extreme desert, including polar deserts; which were cold but with low rates of cloud cover and precipitation³. In contrast, the world's climate was cloudier and wetter than today near the start of the warm Atlantic Period of 8000 years ago⁴.

Estimated global land precipitation increased by approximately 2% over the course of the 20th century, though the calculated trend varies if different time endpoints are chosen, complicated by ENSO and other oscillations, including greater global land cloud cover precipitation in the 1950s and 1970s than the later 1980s and 1990s despite the positive trend over the century overall^{1,3,5}. Similar slight overall increase in global river runoff and in average soil moisture has been perceived³.

Unfortunately no one is looking for our own contribution by misuse of technology making turmoil in environment. The gross use of air conditioning is increasing temperature. If the air condition is reconditioned by using technology to use heat produced by air conditioners to be utilised for energy production it would rather be more beneficial.

Similarly vehicles producing heat must be transformed in energy production which would be beneficial. Industrial machines are also contributing grossly in heat production that could be reutilised for energy production. Thus a little mind set would resolve all crises related to environmental changes, making life stability on our planet earth.

REFERENCES

1. New, M., Todd, M., Hulme, M. and Jones, P. (December 2001). "Review: Precipitation measurements and trends in the twentieth century". *International Journal of Climatology* **21**(15): 1889–1922.
2. Dominic, F., Burns, S.J., Neff, U., Mudulsee, M., Mangina, A. and Matter, A. (April 2004). "Palaeoclimatic interpretation of high-resolution oxygen isotope profiles derived from annually laminated speleothems from Southern Oman". *Quaternary Science Reviews* **23** (7–8): 935–945.
3. Huntington, T.G. (U.S. Geological Survey) (March 2006). "Evidence for intensification of the global water cycle: Review and synthesis". *Journal of Hydrology* **319** (1–4): 83–95.
4. Adams J.M. & Faure H. (1997) (eds.), QEN members. Review and Atlas of Palaeovegetation: Preliminary land ecosystem maps of the world since the Last Glacial Maximum. Oak Ridge National Laboratory, TN, USA.
5. Smith, T. M.; Yin, X.; Gruber, A. (2006). "Variations in annual global precipitation (1979–2004), based on the Global Precipitation Climatology Project 2.5°analysis". *Geophysical Research Letters* **33**(6).

Prof. Kamran Aziz
Head, Department of Biochemistry
Lahore Medical & Dental College, Lahore
Email: kamrankembmb@gmail.com
Cell: 0300-8800708