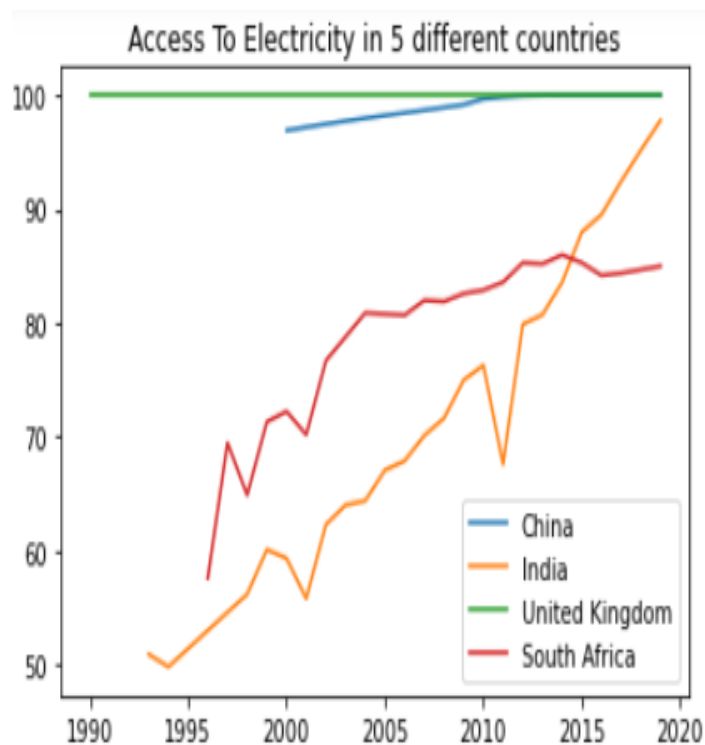


## Exploring public data from the World Bank, country-by-country indicators related to climate change:

Climate change indicators data analysed with different indicators like Access to electricity (% of population), CO2 emission, energy consumption and Agricultural irrigated land.

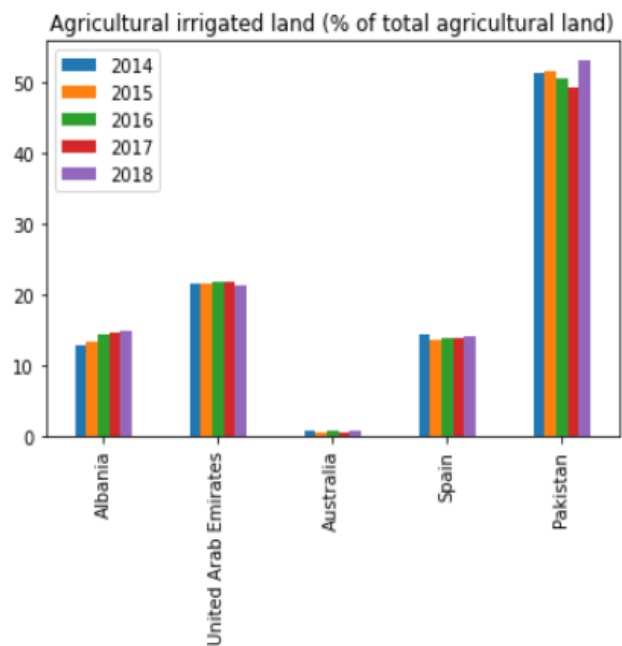
**Access to Electricity** is percentage of population with access to electricity. The data collected from national surveys and international sources.

Below graph shows Access to Electricity in different countries during 1990 to 2020. As per graph, in UK and China the electricity access is 100 and 90-100 %. In SA and India, the value was below 70% initially and keep increasing and in SA it reaches 80-90% and in India electricity access is more than 95 % in recent years.



**Irrigated land** -The details of agriculture land provided with water is showed in below graph.

This refers to the % of total agricultural land irrigated. As per the data obtained from world bank for 5 countries (Albania, UAE, Australia, Spain, Pakistan), The irrigated land availability is more in Pakistan and less in Australia compared to other countries in the graph during 2014-2018

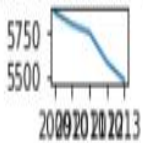


## Energy use and CO2 Emission correlation

The graph shows how the energy use and co2 emission of different countries correlated, during 2019-2013, in the world showed in below graph.

In Australia, energy uses decreases co2 emission also decreasing. In India and UK also showing strong correlation between energy use and co2 indicators. But in Japan these 2 indicators are showing negative correlation.

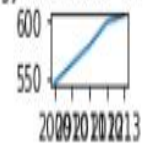
Energy Use- Australia - 2009-2013



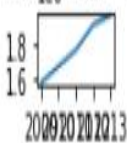
CO2 Emission - Australia - 2009-2013



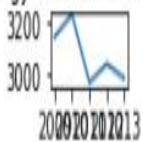
Energy Use- India - 2009-2013



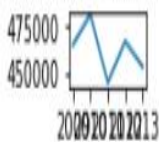
CO2 Emission - India - 2009-2013



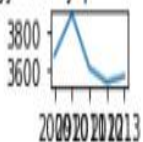
Energy Use- UK - 2009-2013



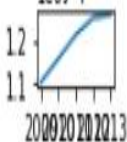
CO2 Emission - UK - 2009-2013



Energy Use - Japan - 2009-2013

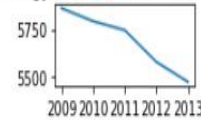


CO2 Emission - Japan - 2009-2013

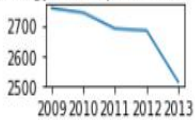


## Energy use in world

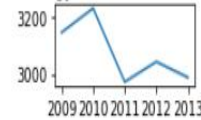
Energy Use- Australia - 2009-2013



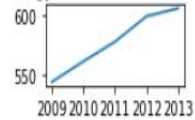
Energy Use - Spain - 2009-2013



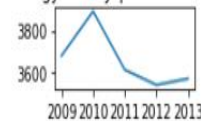
Energy Use - UK - 2009-2013



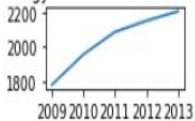
Energy Use - India - 2009-2013



Energy Use - Japan - 2009-2013



Energy Use - China - 2009-2013



The energy consumption is getting decreased in recent years in countries like Australia, Spain, Japan and UK. The data for India and China is showing constant increase in the energy consumption during 2009 – 2013 .

## Annual population growth % of US and UK

- The US data distributions are showing high level of confidence level

US-UK population growth(annual %) data distributions 2010-2020

