Analysis of changes in the agricultural, Terrestrial and forest areas and the impact in GDP of nations

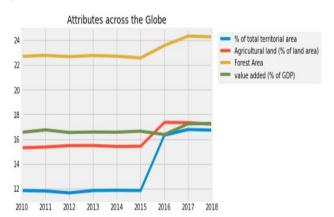
The agriculture, forestry, and fishing industries play a crucial role in shaping the economy and well-being of the world and its inhabitants. Agricultural development, forest protection is an important factor in maintaining a balanced ecosystem and critical tool for safeguarding biodiversity, preserving habitats and rare species, building resilience to climate change, to ensure global food security, maintaining water quality, soil erosion and so on. Here we have done a close analysis of these factors which contribute to every nation and how these reserves influence the healthy economy and biodiversity of any country.

Last 10-year analysis of nine different countries about the agricultural, forest, Terrestrial area distribution and their corresponding GDP values of nations all across the globe has analysed as below.

Attributes	% of total territorial area	Agricultural land (% of land area)	Forest Area	value added (% of GDP)
YR2010	11.84	15.29	22.70	16.54
YR2011	11.79	15.35	22.77	16.74
YR2012	11.64	15.47	22.68	16.53
YR2013	11.83	15.48	22.76	16.57
YR2014	11.85	15.40	22.71	16.56
YR2015	11.84	15.42	22.56	16.64
YR2016	16.31	17.35	23.57	16.37
YR2017	16.78	17.33	24.33	17.23
YR2018	16.72	17.20	24.27	17.26

From these analysis interestingly it can be observed that for the last five years there is remarkable increase in the overall distribution of agricultural ,forest and other terrestrial protected areas all across the world, which is an indication of the change in perspective to enrich and enhance the biodiversity and habitats across the globe.

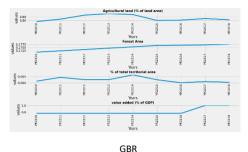
The graphical of average areas of land across the globe clearly depicts the inclination of attributes after 2015 and a corresponding varying GDP can be observed. There is considerable inclination in the total terrestrial protected area curve of about 5.32% after 2015 that implies around 5300 hectors of more land has designated by national authorities as scientific reserves with limited public access, national parks, natural monuments, nature reserves or wildlife

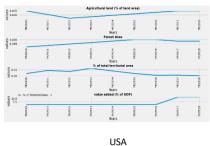


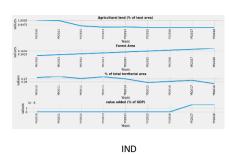
sanctuaries, protected landscapes, and areas managed mainly for sustainable use. From these we can make a broad assumption that there can be a remarkable decrease in the number of Wildlife and Reserves on overall, have adversely affected the Substantial Biodiversity.

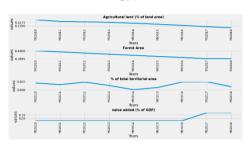
On the same hand, the agricultural land and forest area has also increased after 2015 that points to give there can be a globally integrated approach taken to ensure the for-food security and improved livelihoods. However, after 2015 there we can observe a slight declination in the curve by about .06 and .13% of total hectors of Land. This can be a point of consideration to return, recoup and rebuild the lost part of Ecosystem. At the same time the Value-added GDP also has a very less increase in its value compared to the previous year trends. It could be the reflection of above depletion of Forest and Agricultural area.

For a fruitful analysis we have chosen 4 different countries having different Economic structure, Biodiversity and infrastructures to have deep insight how different countries allot their land for reserves, protection, agricultural and how much it is important for them. We can observe that Initially India is having a very high value of land for agriculture compared with all the other country whereas britan and Japan is having the lowest. This indicated that developing countries like India concentrate more on agriculture major source of Income employement. However, after 2012 the trend changes Britan stsrts to enchance their Agricultural sector. At the same time the Land conserved under Forest is steadly increasing for all countries except Japan although they have enourmous forest resources around 50 % higher than India and Britan the slope remains almost 0 or slightly increasing. The terrestial protected graph has a wavey structure for each countries, more importan









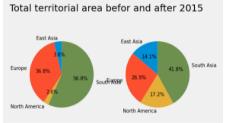
-ly these reseves are decreasing after 2015 except for Japan, thus it indicates that after that period there can be a huge exploitation of natural resources by humans and Deforestation via it converts the forest areas and reserved grooves into Gleaming spaces and Collectively, people have gotten so good at exploiting natural resources that we've multiplied our numbers and spread around the globe to inhabit an incredible array of ecosystems, from snow-covered tundra to sun-baked deserts to rain-

soaked forests. We can infer these attributes have a positive correlation with the Value added GDP as after2016 there is a streak in its value .

To have a precise and clarified analysis we have taken a region wise classifcation in two periods. Here ,It can be seen South Asian Countries have a higher Agricultural lands and that seems to increase after 2015. Where as East Asian And European countries has a decrease in land that might indicate that they give more importance to other secorts of employement rather than agriculture and this might have increased their dependancy on other countries for food .

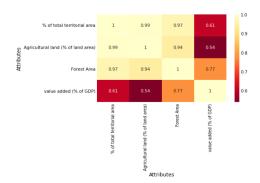


On observing the Forest area and Terrestial Resourses we can infer North American Countries have a higher area for Forest anf Terrestial protected Region. Neverthless, there is a huge decrease in its area after 2015 which indicate huge





Deforestation could touched the equilibruim of the ecosystem .It can be incurred that there are high chances a cases of Global warming, Soil Erosion and Natural calamities Like Floods affecting these Regions. Similar trend is seen with European countries as well. On the same hand, there is a huge increase in Forest area and Terrestial areas in Europe and North American Countries. Which is a tight Indications of initiatives Taken by the authorities for conserving the Biodiversity.



On an overall analysis we cannot infer a strong negetive corellation between agricultural land and forest area ,nonthless on country wise analysis we can infer that there is huge deforestation taking place whereby coverting the forest for include population growth, agricultural development, land tenure, governance of land-use changes, changing markets, and active policy interventions. Surprisingly that doesn't decrese the value added GDP as it compensated from the above Underlaying Sectors. However, as a globally integrated approach to conserve the Biodiversity and in 2015 the UN leaders adopted a series

of Sustainable Development Goals (SDGs) for 2030 as a plan for action for people, the planet, and prosperity.

Never let our nature go wrong; biodiversity is the way!!!