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India, Renewable Energy

Solving India's Fossil Fuels Complications

With the second largest population in one country in the entire world, surpassed by only China. India's projected population for 2022, is 1,448,326,879 and is also projected to overtake China. This hefty amount of almost 1.5 billion people in this South Asia country is quite concerning for many people. The density per kilometer is 382 people in India compared to the United States 33.67 people. This is difficult having an average of 4.8 people per household. As it creates various major problems politically, economically, socially, culturally, and most importantly in the environment.

Being a peninsula, surrounded by water on three sides, India has hot summers and cold winter seasons. This allows this country to be a major producer of rice, cotton, corn, and wheat with exports transported globally. Also, India tops the United States, Russia, and China, for having the most cultivated land in the world, alongside its 60.43% of the land is agricultural. However, two-thirds of India make less than two dollars, causing India to be one of the poorest countries in the world. Poverty is a large factor in what is occurring to the environment, with higher positions of people being in control of the conditions.

Like a domino effect, poverty issues will affect the education of students in India. In 2021, literacy rates in India for ages 7 and above, was 82.14% for male and 65.46% for females. This emphasizes the topic of gender equality concerns. Women in India are treated as property in many specific regions. This causes females to have less freedom for one's own choices in their life. Also, it is estimated from research that more than 2 million women, just in India, are missing each year. This is due to women not getting the same treatment as given to men through healthcare and the violence shown.

Ranking 154th in 195 countries in the healthcare index 2016, India's healthcare system is unfortunate. Having an extremely large population does not benefit the healthcare system based in India. As an example, the COVID-19 pandemic significantly impacted people going through poverty, with many Indian villages not having substantial wealth for hospitals and to be treated for severe cases.

Pollution in India is a crucial problem. India is said to be one of the top 5 countries to emit air pollution in the entire world. According to the World Health Organization, 7 million people around the world die from just breathing in polluted air. In addition to this, the World Air Quality Report 2021, created a list of the top 50 cities in the world having the worst air quality. In this list only, India has 35 cities of the 50 cities listed in the world.

Air pollution occurring in India is because of the use of fossil fuels. So, what exactly are fossil fuels? Fossil fuels are natural fuels, some examples are coal, oil, and natural gas. Millions and millions of vehicles in India use gasoline to power them. And, most electricity used there is powered through coal, for households. These fossil fuels allow for easy transportation of energy.

Economically speaking, fossil fuels are very cheap, as an energy source. This allows the public or privates to reap tremendous profits. Industries available globally are found to use these cheap, quick solutions for business and commercial enterprises. Nonetheless, all these fossil fuels may show substantial benefits, but

there are unseen long-term consequences from this consumption.

What are these consequences or effects of the burning, and usage of fossil fuels? There is much evidence that fossil fuels influence the environment we live in. Undoubtedly, the same people who live here are damaging the future of the planet we call home. This is because the effects of burning fossil fuels are air pollution, water pollution, and climate change. As fossil fuels are burned, carbon dioxide, carbon monoxide, sulfur dioxide, nitrogen oxides, lead, and particulate matter are being released concurrently.

You may have heard of climate change, as it is frequently spoken about in news reports and studies. The main reason why climate change is occurring is due to carbon dioxide being discharged through fossil fuels. When the atmosphere is obtaining more and more carbon dioxide, greenhouse gasses increase so that now more heat is being trapped. Now, the carbon dioxide will keep reflecting heat for many years. India being a major producer of fossil fuels, is very connected to this major problem. Finally, with air pollution, many health effects will occur, including cancer, lung diseases, and other issues. India as a country is going through a large struggle with the topic of air pollution, compared to others. These are the fossil fuel problems happening in India.

Now, after discussing a slight part of fossil fuels. What can India do? What can the world do? These are questions we certainly may now ask. First things first, India needs their actual-entire 1.5 billion population of people to recognize the importance of the environment. Lots of people today may just be careless and honestly want no part. Individual people like us, in India, should start working towards guarding their energy usage and try to find ways to reduce vehicle usage.

Some simple ways to conserve energy is by turning off electrical equipment while not in use or needed. And using energy-efficient devices like washing machines, air conditioners, washing and drying machines, and heaters also helps to reduce energy. A major part of individuals conserving their usage of fossil fuels is by reducing the distance traveled by fossil fuel-powered vehicles. These are some ways independent groups of people in India can reduce fossil fuels used in their own daily life.

Countless corporations and businesses in India, play a large role also, with fossil fuels. Likewise, businesses can use energy-efficient equipment to help. And also reduce energy, by being mindful of the energy used. This will help fossil fuel utilization to decrease. But, India importantly, must be using this other energy source called renewable energy.

Renewable energy is defined by the dictionary as "energy from a source that is not depleted when used, such as wind or solar power." Here's a list of different types of renewable energy: solar energy, wind energy, geothermal energy, biomass energy, hydroelectric energy, tidal energy, wave energy, and algal fuel. There are so many types of renewable energy, India can utilize. Using these renewable energy sources as a long-term plan will reduce the burning of fossil fuels to a great extent. India's parliamentary government should fund some use of renewable energy in corporations in some sort of way. And highly favor those corporations over others who exceed and depend on fossil fuels.

With the economy being the major issue in India, these plans must occur step by step. Foreign aid should be tried to be acquired by international non-profit organizations for poverty hardships and to help with the pollution experienced by people and families of India. With the popularity of electric vehicles being created and developed throughout the world, this system of technologies should be utilized in India.

In the initial stages, factories for international exports of cars should be made and allowed before other countries take control of the industry. This would be a collaboration of the Indian government and

Western-based electric vehicle manufacturers like Tesla and Rivian. With these factories, the production of electric vehicles can benefit both the country of India and other foreign international countries. On the financial side, more jobs would be exceedingly increased and have more opportunities for poor village regions. All this would give the Indian economy a major boost with this specific type of industry.

In the second step with electric vehicles, local-based Indian corporations should try to incorporate electrical vehicles with backing from the government. With funding going towards electric vehicles provided at low-cost base prices and the manufacturers for the Indian population should be rewarded through the economic system. This will allow India to have a goal for 75% of vehicles being used there to be electric.

India's government system should be supporting not wealthy regions. Like many people, there are many going through hunger and starvation. India's GDP Per Capita is $1,901 USD, which is very low for a high population country. With the government, corruption should be taken out, by using force and order using the representation of the people. These are some things happening in situations in India.

Even with the world's 2nd largest population of 1.5 billion, India can fix its problems concerning fossil fuels and air pollution. India can be invested by other foreign international countries, to benefit India, investors, and the environment. This will also help the health of locals, with the topic of air pollution including the many diseases occurring. Non-renewable vehicles will contribute to India's development and growth as a country. Fossil fuels will no longer be a significant major problem or threat to India. With all going on in this South Asia country, India can raise itself as its own leader among others. In conclusion, these are some beneficial solutions that help to the complications of India's fossil fuel usage happening today and in the future.

Works Cited

"India Population 2022 - Current Population of India." Www.indiaconvey.com,
        www.indiaconvey.com/population/india-current-population.html.

2021 Census of India : Facts, Important Questions for Competitive Exams. 30 Nov. 2019,
        censusofindia2021.com/2021-census-of-india/. Accessed 23 Apr. 2022.

Pariona, Amber. "What Type of Government Does India Have?" WorldAtlas, 22 June 2017,
        www.worldatlas.com/articles/what-type-of-government-does-india-have.html.

"Agricultural Land (% of Land Area) - India | Data." Data.worldbank.org,
        data.worldbank.org/indicator/AG.LND.AGRI.ZS?locations=IN.

"India's Agricultural Exports Climb to Record High | USDA Foreign Agricultural Service." Usda.gov,
        2014, www.fas.usda.gov/data/india-s-agricultural-exports-climb-record-high.

"India Country Profile - National Geographic Kids." Geography, 21 Mar. 2014,
        kids.nationalgeographic.com/geography/countries/article/india.

"India GDP per Capita 1960-2022." Www.macrotrends.net,

www.macrotrends.net/countries/IND/india/gdp-per-capita#:~:text=India%20GDP%20Per%20Capita%20-%20Historical%20Data%20. Accessed 23 Apr. 2022.

"Indian Families' Size: Interesting Facts." IndiaTimes, 15 June 2014, www.indiatimes.com/news/more-from-india/size-of-indian-families-5-interesting-facts-155086.html. Accessed 23 Apr. 2022.

"India Wages 2022 | Minimum & Average | Take-Profit.org." Take-Profit, take-profit.org/en/statistics/wages/india/. Accessed 23 Apr. 2022.

Access to Healthcare in India – Geography and You. geographyandyou.com/access-to-healthcare-in-india/.

"U.S. Population Density 1950-2022." Www.macrotrends.net, www.macrotrends.net/countries/USA/united-states/population-density#:~:text=The%20current%20population%20density%20of%20U.S.%20in%202021. Accessed 23 Apr. 2022.

"Projections by Countries." Ined - Institut National d'Études Démographiques, www.ined.fr/en/everything_about_population/data/world-projections/projections-by-countries/#:~:text=Total%20population%20%28in%20thousands%29%20of%20the%2050%20most. Accessed 23 Apr. 2022.

"Poverty in India: Facts and Figures on the Daily Struggle for Survival." Www.soschildrensvillages.ca, www.soschildrensvillages.ca/news/poverty-in-india-602#:~:text=Two-thirds%20of%20people%20in%20India%20live%20in%20poverty%3A.

"Indian Women, Women in India." Www.mapsofindia.com, www.mapsofindia.com/culture/indian-women.html#:~:text=Over%20the%20ages%20in%20India%20women%20have%20been. Accessed 23 Apr. 2022.

Biswas, Soutik. "How India Treats Its Women." BBC News, 29 Dec. 2012, www.bbc.com/news/world-asia-india-20863860.

Irfan, Umair. "New Delhi Is Once Again the Most Polluted City on Earth." Vox, 8 Nov. 2018, www.vox.com/energy-and-environment/2018/11/8/18075340/delhi-pollution-diwali-india. Accessed 23 Apr. 2022.

Mar 22, TIMESOFINDIA COM / Updated:, et al. "Delhi World's Most Polluted Capital; 35 of 50 Cities with Worst Air Quality in India: Report | India News - Times of India." The Times of India, timesofindia.indiatimes.com/india/in-2021-delhi-most-polluted-capital-in-world-no-indian-city-met-who-air-quality-standard-report/articleshow/90373442.cms. Accessed 23 Apr. 2022.

National Geographic Society. "Fossil Fuels." National Geographic Society, 31 May 2019, www.nationalgeographic.org/encyclopedia/fossil-fuels/.

"15 Important Fossil Fuels Pros and Cons You Need to Know." Green Coast, 16 Sept. 2019, greencoast.org/fossil-fuels-pros-and-cons/#:~:text=%20Uses%20of%20Fossil%20Fuels%20%201%20Most.

"What Are the Consequences of Burning Fossil Fuels?" Terrapass, 25 Feb. 2022,
    terrapass.com/blog/consequences-of-burning-fossil-
    fuels#:~:text=There%20are%20three%20adverse%20effects%20of%20burning%20fossil.
    Accessed 23 Apr. 2022.

"Greenhouse Gases." MIT Climate Portal, climate.mit.edu/explainers/greenhouse-gases.

United States Environmental Protection Agency. "The Sources and Solutions: Fossil Fuels | US EPA."
    US EPA, 4 Feb. 2019, www.epa.gov/nutrientpollution/sources-and-solutions-fossil-fuels.

Society, National Geographic. "Renewable Energy." National Geographic Society, 21 Feb. 2013,
    www.nationalgeographic.org/article/renewable-energy/12th-grade/.