

The Socio-Economic Influence on the Livelihood Process of Recent Days Societies through the Production of Various Energy Sources

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Abstract

Livelihood process is influenced by various factors and the socio economic factors are becoming critical these days. In this research study that influence will be discusses in various that have been divided. The first part is the introductory part here the brief background about the topic have been provided the importance of this research along with the research aims and objectives. After the introductory the methodology and material section have been explained where the way data have been collected and the way data have been analysis have been explained briefly. Secondary data have been taken for this research and it have been analysed with the by thematic analysis by preparing themes. The next part is the results part here the detailed rationale have been provided regarding the research topic it includes four graph that have been aligned with the research topic. The graph includes the globally energy consumption, global renewable energy supplier and global GDP growth rate. The GDP growth rate and the GDP size graph aims to provide how the energy production affects the livelihoods of different countries. The results part a brief discussion part has been covering the useful finding and all the important points that have been covered in the results part have been explained thoroughly. Finally, this study has been concluded with the conclusion part where the whole discussion has been concluded.

Keywords

Globally, livelihood, Renewable energy, and socio-economic.

INTRODUCTION

Energy sources are a vital part of the livelihood of human beings across the globe. The energy sources that have been taken for consideration are renewable energy and green energy. Due to the threat of climate change most of the operation of the energy production and usage desired to shift the process to green and renewable energy. Nuclear powered energy is also considered by most of the nations across the globe as the prime source of energy [1]. The reason being the low carbon emission and generates a high amount of energy. Moreover, the people as well as politicians of the developed nations are shifting their energy sources and adapting the renewable resources of energy. Therefore, it can be said that the countries which have high GDP per capita have the possibility to change its process whereas the people of the developing nation or the emerging economy does not have that leverage [2]. The societies of the developed nations have greatly influenced the energy usage and consumption. The energy usage as well as consumption by humans could be understood with the help of studying all the industrial revolutions. Starting from the first industrial revolution to the fourth industrial revolution each of this period had witnessed some of the changes.

The study aims to analyse the impacts of socio economic factors on livelihood especially in the production of the energy sources through different methods.

OBJECTIVES OF THIS STUDY

- To investigate the influence of the socio economic factor on the livelihoods of the persons in the production of the energy sources.
- To analyse the importance of renewable energy for the livelihood of the people.
- To evaluate the production of which of the energy sources is best suited for the current scenario.

MATERIALS AND METHODS

The data that have been used for the conducting those research is the secondary data and the collected data has been analysed by the thematic data analysis method. Moreover, the data had been collected on a secondary basis and data had been analysed by thematic analysis. It could be the whole process completed in less time as compared to quantitative data analysis. Secondary data mainly includes the journals, books, columns, theories, and many more. Thematic data analysis is mainly done for quantitative data analysis [3]. The thematic data analysis will be done with the help of preparing themes according to the aims and objectives of this study. There have been many occasions where thematic analysis theories are reliable or valid or not. Hence, for this research the data had been collected from reliable sources. Also while using the theories and concept it has been taken care that the outcome of the discussion must be valid and reliable. The subjects that have been chosen for the study are based on renewable energy sources, green energy sources and the



process of its production. Further, the topics it asks about socioeconomic factors enhance the subjects have been chosen on the basis of the social economic and its influence over the livelihoods of the people.

RESULTS

Socioeconomic can be explained as the social science for that economic activity and its progress generally shaped by the social process. It could be understood as the company's investment in a particular and how the growth of the company is compiled with the growth of that society. There are a lot of factors that influence the livelihood process and the socio-economic factors are one of those factors. The production of energy includes various types of energy but the two main types of energy that are often considered vital are renewable and non-renewable resources. Livelihoods all across the world is affected by the production of both the types of the energy production but the significant renewable.

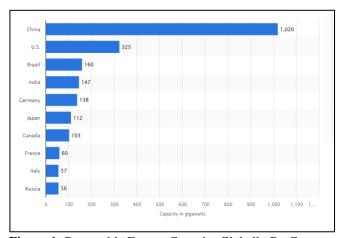


Figure 1: Renewable Energy Capacity Globally By Country Wise

The above graph shows the countries that have the renewable energy capacity and this could easily figure out the importance of renewable energy [4]. According to the graph, China is the lone country which has the highest capacity for renewable energy, which is estimated around 1020 gig watts of energy. The other countries which are progressing in the renewable sector are the USA, Brazil and India. The total production of renewable energy by the USA is around 325 gig watts which is way behind China. Globally these two countries are the competitors in all of the sectors whether it is the defence sector or the economic sector. Energy security is significant for both the countries therefore it can be that both nations have made progress in the energy sectors [5]. Brazil and India are the emerging economies and both the countries are part of the BRICS group and both the countries have taken various initiatives for producing as much energy through renewable sources. As of the year 2021 India has the capacity of generation of energy through renewable sources around 147 gig watts.

Due to the global shift towards the renewable energy sector the livelihoods of the people have been affected globally. The societies of the developed are urging their government to minimise carbon emission and use as much as green energy. It can be argued that the socio-economic status of the developed nation suits this. At the same time, the societies of the energy economic countries like Russia, China, India, Brazil and Indonesia demand faster economic growth [6]. People and the business of these countries cannot afford to change the energy production directly towards green energy instead they are trying to implement this in a phased manner. Also they desperately need the cooperation from the developed nations technologically and technically.

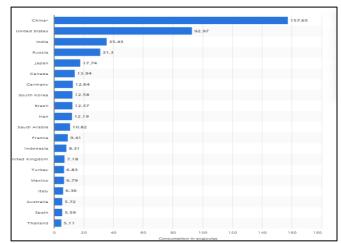


Figure 2: Primary Energy Consumer of the World

It also largely depends upon the consumption of the energy and the global energy consumer has been given by the following graph in the figure 2. According to the figures that have been taken here China is the country which has the highest consumption of energy which is around 157.65 exajoules. China is the country which is the globally supply chain hub and most of the things around the world are manufactured in China. Therefore, China desperately needs the energy for the proper operation of the manufacturing process. The second highest energy consumer is the United States of America which consumes 97.97 exajoules of the energy annually. The American economy is largely dependent on the service sectors and the country is a developed nation hence the society of the USA can afford to shift themselves to renewable energy or green energy [8]. The whole list companies list where the two different countries represent the developed nation and the emerging economic countries. Today's production of energy has been taken pale using the solar cells, hydro power and wind power. Companies these days are taking actions to become renewable and green in their production of products and green supply china or the sustainable chain are the two best examples of renewable energy utilisation by the companies.

Countries like China and India have lower per capita income compared to the western nations. The both the countries are emerging economic and socio economic conditions state that they need more time to adopt the green energy power generation method. Energy consumption of the Indian in the year 2021 was 35.43 exajoules. In the year 2015



the international solar alliance was founded and headquarters is located in Guru Gram India [9]. The aim of this Alliance is to provide assistance to the countries which are weak in generating energy with the help of solar power. As of now there are 110 international members including France and the United States of America. In the year 2015 one major event occurred that was named the Paris agreement where the world leaders from all over the world came to Paris for an emergency meeting and in that meeting the heads of states of all the countries have accepted that climate change is a threat to humanity. From then an annual meet named the Conference of party generally held every year where the world leader came and shared their experience in fighting climate change. The last Cop27 meet was hosted by Egypt and it is generally held by the united nation climate change conference.

It can be said that if the socioeconomic factors of all the countries were similar the sources of the energy production would impact the livelihood uniformly. Socio-economic conditions of all the countries are different and all the countries have their own sought of interests. Similarly, livelihoods of different countries are also affected differently. Developing economic needs to produce more and more energy to boost their economy and generate more and more jobs. But there has been a constant threat that is posed by climate changes and for those countries all across the globe are committed to reducing carbon emission. Developed countries are taking various initiatives for reducing their carbon emission and through different forums and meetings like the G7 meeting.

Livelihood comprises the capabilities, assets, activities that are required for the living of the people of a particular society. A livelihood can be stable and sustainable if the people of the community cope with the difficulties like stress, shocks, and maintain sustainability in the energy consumption as well as generation [10]. Globally, the livelihoods of different countries are different as the development also varies from country to country. Livelihoods of African as well as South America continent are different from the other continents. According to the world economic forum more than 70% of the African nations are dependent on Agriculture for their livelihoods. Most of the North African nations are Islamic nations and they are situated in the mid of Sahara or the sub Saharan region. The economic growth of these countries is directly or indirectly dependent on Crude Oil and natural gas. Countries like Egypt, Libya, Morocco and Algeria have economies which are dependent on oil exports. Mid Africa are mostly Non-Islamic countries, and all of them are tribal Africans.

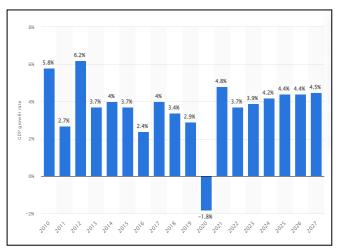


Figure 3: GDP growth rate of Africa

In figure 3 it has been clearly stated that how the livelihood of Africa has been going through the year 2010 to the year 2027. The overall GDP growth rate of Africa in the year 2010 was 5.8% which is good but most of it comes from agriculture. Service sector of Africa is not up to the mark and this is the reason why new emerging business has not been coming from Africa [12]. Countries like Congo, Central African Republic all of them need to improve a lot as all of these countries have higher levels of corruption and the per capita income of the country is very low. If the graph is closely examined it would be seen that in the past decade the GDP growth rate of Africa had never reached the double digit figure or go beyond the 8% growth rate mark. Historically, Africa was used by many of the foreign invaders for colonization like the French colonization, British and Dutch colonization. A vast majority of North Africa was once a part of the French colony. All these European nations take useful natural resources like textiles, precious stones, precious metals, and natural resources like oil and natural gas.

During the colonization period the livelihood of all of the people of Africa were seriously affected but the situation is pretty much similar these days. During the covid-19 pandemic there have been many occasions where the country of Africa was desperately in need of medicine and vaccines [13]. Global GDP was affected during the pandemic so as the GDP growth rate of Africa. In the year 2020 the GDP growth rate of Africa was -1.8%. Meanwhile, Statista had estimated that the overall GDP growth rate of Africa in the year 2027 will be 4.5%. The figures are pretty much evident that the African economy had the potential to grow if all they needed was good political leadership with a visionary mind-set. Socio-economic factors will also play a critical role in influencing the economic factor for the energy production of the countries of Africa. Recently the production is shifting towards renewable energy and green energy. In case an African nation wants to develop their economy they desperately need to boost their economic growth they possess two front challenges [14]. The first challenge is to increase the economic growth of the country along with reducing carbon emission. Society of Africa or the livelihood of the



country is going to be affected by it the most.

Energy production of North America is totally dependent on the oil production of the USA, Canada and Mexico. Countries of the North America continent got the leverage to use the US economy for their own development in the energy production or improving the socio economic condition of their country. People living in the South America continent do not have that leverage and due to this the economic develop in the South America continent is slower as compared to the North America continent.

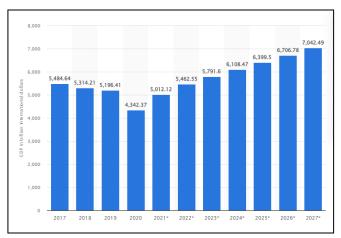


Figure 4: GDP of South America Continent and the Caribbean Islands

The figure 4 had talked about the GDP size of the Latin America and Caribbean Islands from the year 2017 to the year 2027. According to the graph that had been provided, the GDP of the Latin America and Caribbean Islands was around 5484 billion US dollars [15]. If Latin America is taken in the centre there are only 12 countries in the continent and Brazil being the largest country. Except for Brazil, Venezuela is the major economy of the country along with Argentina & Chile. For livelihood, the majority of the people of Latin America are involved in the works like agriculture, industry, forestry and mining. The Amazon rainforest, which is the largest rainforest in the world, is in South America, especially in Brazil. Livelihood of these countries is pretty much dependent upon agriculture and mining. The GDP had however started depreciation from the year 2017 and 2020 due to various reasons like the poor political leadership and poor decision making of these countries. The socio economic factors of Latin America as well as Caribbean Islands are pretty much similar to that African nation [16]. Valenzuela is the only country of Latin America which has an enormous amount of crude petroleum but still countries' economic condition is not good because of the political unrest and US economic sanctions.

Society of Latin America is pretty much similar to that of Europe, especially Spanish culture. The reason behind the European similarity is once the whole Latin America continent was a part of European occupation. Majority of the parts of the continent came under the influence of the Spanish empire while the Brazilian territory was a part of the

Portuguese occupation. Lifestyle and livelihood of the people of Latin America are similar to that of Europeans [17]. Recent years are quite challenging for the world as well as for the Latin American people. If the figure is carefully studied it will be found that in the year 2020 the GDP of Latin America was 4342 Billion US dollars. This depreciation in the GDP of the continent was recorded due to the Covid-19 pandemic. The shortages of medicines and vaccines were also reported in the Latin American countries along with the Caribbean islands. Developed nations and the developing nations had taken the step to fulfil their needs therefore the government successfully fought the pandemic.

Moreover, Energy production is a vital part of the continents as well as for the countries as by this it provides power to the manufacturing industry and also the mining industry. Electricity is the vital part of all industries whether it is small scale industry, medium scale industry or the large scale industry. Production of electricity in this continent is largely done with traditional methods like coal, crude oil and hydropower. The continent had three main river basins namely the Amazon, Orinoco and Paraguay [18]. Due to this the country has been generating electricity with the help of Hydropower. The primary energy production that has been practiced in the South America continent is largely cantered on non-renewable sources of energy. Countries of South America have also pledged to reduce the carbon emission in the Paris agreement. Production of non-renewable resources of energy largely depends upon the inclusion of technology like solar power, hydro power and tidal power. Countries have taken steps to minimize the carbon emission and for that the steps that they have taken are reducing deforestation, reducing the emission from automobiles, promoting green energy and many more.

Therefore, it can be said from the above discussion that the Social economy had a huge impact on the livelihood process of the people of the recent days especially in the power generation. Globally, there has been a race to reduce carbon emission and for that the countries are making efforts to reduce the emission along with the growing economy. It will take time to reduce the emission and the consumption of the non-renewable sources of energy especially for the countries which are in the developing phase.

DISCUSSION

Socio-economic influence largely affects the livelihood of the people in any part of the globe. Especially energy production as it is the energy that is driving the world's development and progress. In case the energy supply or production is hampered due to any of the reasons like the global recession, geopolitical tensions or pandemic people all around the world witness its effects. It has become important in recent days to understand the ill effects of the non-renewable resources. Renewable energy includes the green energy like tidal energy, wind energy, Hydel energy. All of this energy requires modern techniques and investments and here comes the class division among the



countries. Countries which have developed economies enjoy the leverage to make their energy production more and greener whereas countries whose economies are growing or are at developing stage have to face the challenges.

During the industrial revolution, the developed nations of today have made progress in the manufacturing and in the services sector. The energy consumption in these countries mainly includes coal and crude oil. Today all of these countries have high per capita income and purchasing power of the people of these countries is higher than that of emerging economies. In today's world, the threat posed by climate change is huge and countries are taking these threats seriously because many of them have imposed a ban on the production of energy through non-renewable resources and are setting their target to become carbon neutral as soon as possible. Economic challenges of emerging markets are different in today's world and the challenges have even worsened by climate change. Countries which are members of BRICS have their own challenges whereas the countries of the G7 group have their own challenges.

There are some of the major developments in the renewable sector and some of the popular inventions are the electric vehicles, solar powered appliances, and floating wind turbines. Energy production in the developing and developed nations is mostly cantered on traditional sources of energy. Adoption of green technology is a long term process and cannot be included in a day. A slow phased manner of shifting towards the green technology will be adequate for them. Livelihoods of all the developed economies are catered to by technology and innovation along with the services sector like the IT and advanced robotics are becoming the usual norms. On the other hand, the livelihood of most of the developing economies as well as the emerging economies is dependent on agriculture. Energy production needs immense investment and close cooperation with the developed nations for the emerging economy then only energy production will be sustainable.

CONCLUSION

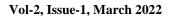
Livelihood process includes the way people are living their life, the way they are earning along with the way they are generating their life. Introduction parts of this research study include a brief introduction of the topic that is about the socio-economic influence on the livelihood of the people in today regarding all the ways of energy production. It also includes the aims and objectives of this research which is to understand the ways the socio-economic factors are affecting energy production globally and the countries that are affected by it. Along with this the objectives of this research had been given which is to understand the importance of energy production especially the renewable energy. After that the methodology part has been discussed which where that data collection has been explained along with the data analysis section. For this research the data analysis had been done with the help of thematic analysis and data had been collected on the basis of a secondary data collection method. Also the subjects that had been chosen for the study are based on the livelihoods of the people along with renewable sources of energy.

The next section that has been discussed here is the result when a detailed rationale about the topic has been explained. It has been explained by using graphs to understand the depth of livelihood and socio-economic status of a country regarding the energy production of not only renewable but also non-renewable resources of energy. Countries like China, USA and India are the three countries that have the highest emitter of carbon globally and they are the highest consumers of energy. Most of these energies are in the form of coal, oil and natural gas all of them are non-renewable natural resources. From all of this discussion it can be figured out that for adopting renewable energy there is a continuous skirmish between the developed economy and emerging economy.

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