

The Psychological and Environmental Impacts of Solar Energy Industry Projects in Nigeria



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Abstract

The innovative use of solar energy which is one of the climate change mitigation and adaptation strategies is vital for sustainable development in Nigeria. Climate change, global warming and other related environmental challenges which constitute a threat to sustainable development in Nigeria have also created opportunities for green entrepreneurship. This study highlights the psychological and environmental impacts of solar energy industry projects in Nigeria. It also identifies that a large number of solar energy products have been developed in recent times by scientists, engineers and researchers which need to be appreciated and utilized in Nigeria. Through literature review and participant observation, this study identified that there is a great need for individuals, institutions and communities to adopt the use of solar energy which is eco-friendly and has the capacity to provide green skills, green technology and green jobs for sustainable economic growth in Nigeria. This paper concludes with the call for more intensive research to maximize the green entrepreneurial opportunities in the use of solar energy for sustainable development in Nigeria.

Keywords: Climate Change; Projects; Solar Energy; Sustainable Development

Introduction

Nigeria is a country which has the abundance of human and natural resources, including skills and talents which are needed to maximize the green entrepreneurial opportunities in the solar energy industry for our sustainable development Ajator, Anabaraonye & Ewa [1]. Impact investment in the green entrepreneurial opportunities in the solar energy industry in Nigeria will certainly go a long way in meeting development needs and helping the nation to achieve the sustainable development goals Anabaraonye, Okafor, & Eriobu [2] In the recent past, Nigeria has witnessed series of climate-related disasters, ranging from the increased health risk, declining agricultural productivity, biodiversity loss, drying lakes, famine, conflicts or social unrest, poverty, worsening food insecurity situation, heat stress, declining soil capacity for agricultural production, increased natural disaster, extreme weather events, among others. These have resulted in huge ecological and economic losses and efforts

must be improved to stem the tide of its effects Akpodiogaga and Odjugo [3]. Proper climate change education and education in the use of solar energy for sustainable development will go a long way to address a lot of issues of environmental pollution and degradation in Nigeria Anabaraonye [4]. Education is an essential element of the global response to climate change and sustainable development. The increasing globalization of education makes it necessary for educators and managers to be aware of application of internet technology in the field of human and sustainable development. This internet technology can also be used innovatively in educating communities and institutions in Nigeria about the use of solar energy for sustainable development in Nigeria. With the advent of the internet, people, organizations, and businesses are better informed and connected to each other than ever before. Information that once took several processes and procedures to obtain is now readily available online Anukaenyi [5].

Methodology

Materials used for this study were derived from online academic journals, magazines, articles, conference papers, textbooks and educational materials from libraries. The researchers gathered a lot of materials for the research but summarized the characteristics of the papers that centered more "The psychological and economic impact of solar energy industry projects in Nigeria". This enabled the researchers to generate the synthesis of various views of other researchers on the subject matter.

The Positive Impacts of Solar Energy Infrastructure Projects in Nigeria

Suitable impact investment strategies will enhance green entrepreneurship opportunities in the solar energy industry in Nigeria and help in building resilience and reducing vulnerability for a sustainable future. The Solar Energy Industry projects is an infrastructure project in Nigeria which has lots of positive impacts thereby helping to achieve the United Nations Sustainable Development goals. Energy is the mainstay of Nigeria's economic growth and development. It plays a significant role in the nation's international diplomacy. It also serves as an input into the production of goods and services in the nation's industry, transport, agriculture, health and education sectors, as well as an instrument for politics, security and diplomacy. Finding solutions to the environmental issues that we face today requires long-term planning actions for sustainable development, and renewable energy resources are the most efficient and effective solutions given the close relationship between renewable energy and sustainable development Manso & Behmiri [6], Sambo [7] identify that a large number of solar energy devices have been developed by scientists in various parts of the country. The devices which are ready for incorporation into the economy especially for rural and urban areas as follows: Solar Cookers, Solar Water Heaters, Solar Dryers, Solar Stills, Street Lights and Traffic Controllers, Water Pumping, Storage of Vaccines and Drugs ,etc.

The Negative Impacts of Solar Energy Infrastructure Projects in Nigeria

In the recent past, Nigeria has witnessed series of climate-related disasters, ranging from the increased health risk, declining agricultural productivity, biodiversity loss, drying lakes, famine, conflicts or social unrest, poverty, worsening food insecurity situation, heat stress, declining soil capacity for agricultural production, increased natural disaster, extreme weather events, among others. These have resulted in huge ecological and economical losses and efforts must be improved to stem the tide of its effects Akpodiogagaa & Odjugo [3] This can be achieved through the proper execution of the solar energy infrastructure project in Nigeria. One of the negative impacts of the Solar Energy

Infrastructure Projects in Nigeria is that it has led to disruptive innovation among companies and institutions in Nigeria. Many workers who were employed in the Oil and Gas Industry which releases excessive greenhouse gases face the risks of being laid off from work thereby leading to unemployment among many youths in Nigeria Awogbemi [8].

Recommendations

The authors hereby make the following recommendations:

a) Further research and development in the use of solar energy in Nigeria that will foster our sustainable environment, sustainable development and economic growth should be carried out.

b) The government, policy makers, farmers and well-meaning Nigerians should invest in green entrepreneurship because it comes with green innovations which provide green jobs and aid the nation in sustaining her economic growth. Convening seminars for those interested in green entrepreneurship including farmers, educational blogging and use of green poems are also other ways to sensitize the people about the effects of environmental challenges.

c) Existing entrepreneurs should comply with green processes in the use of solar energy which could create opportunities for other green businesses for more sustainable livelihood initiatives.

d) The government should put in place the necessary policies, grant opportunities and the enabling entrepreneurial environment to encourage entrepreneurs to maximize the solar energy industry sector.

Conclusion

Nigeria must decrease her reliance on fossil fuels and begin to avail herself of the use of solar energy products and technology which have a lot of advantages and help in climate change adaptation and mitigation Ajator, Anabaraonye & Ewa [1]. Investing in the quality infrastructure of the solar energy industry will lead to a green, inclusive and resilient recovery in Nigeria. The technology and use of solar energy in homes and companies across the country should be greatly encouraged. The Nigerian government needs to take drastic steps to stop excessive burning of fossil fuels and radically transform our societies if we want to stay within the 1.5 degrees Celsius of warming limit in line with the Paris Agreement. More intensive research is needed in the field of disruptive innovation approach to maximize the green entrepreneurial opportunities in the solar energy industry for sustainable development in Nigeria. The use of solar energy as we have discovered through this study will certainly go a long way to ensure sustainable development and economic growth in Nigeria.

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