International Journal of Future Generation Communication and Networking
Vol. 13, No. 2, (2020), pp. 89 - 93

A Study of Green Energy and its types of sources for Financial Enhancement in Rural Area

Prof. Priyadarshani Zanjurne[1], Dr. Prabha Singh [2],

Assist. Prof., Modern Institute of Business Management

Professor, Imperial college of Engineering and Research

Abstract

The current paper is aimed to raise levels of financial growth plus social development with the use of green energy for rural areas. The enhancement of rural area can be accomplished with green energy and its products through applicable financial incentives, subsidies, and supporting infrastructure to safeguard reliability, quality and efficiency. It has been observed that, up to now, certain key issues of the financing for rural green energy have not been passably reconnoitred. Many of the research papers signposts that the enhancement of rural green energy depends on an assortment of factors, but finance is a key ingredient. So, the primary focus of the researchers of this paper is on financial enhancement of rural area with the help of green energy and its types of sources.

Keywords: *Financial Growth, Green energy, Products, Rural area.*

INTRODUCTION:

Every developing economy has core components and green energy is one of them. Green energy has potential to eradicate poverty and improve living standards of the rural peoples. It contributes unswervingly to meeting both basic needs and more erudite human needs. However, many households, small businesses, and communities in rural areas have no access to these kinds of energies. In genuine utmost of the villages do not have trustworthy, consistent, adequate, or good quality power. Still in this advanced era many of the villages rely on traditional facilities in their day today life such as wood, animal dung and agricultural residues for cooking. The deficiency of energy is midst the key impeding forces thwarting financial enhancement and, subsequently, slackening down deficiency mitigation and the growth of the rural sector. The influence that lack of access to contemporary energy has on financial and social development and the lives of rural people is increasingly recognised by many of the researchers in their study.

Green energy comes from natural sources such as sunlight, wind, rain, tides, plants, algae and geothermal heat. These energy resources are green, meaning they're naturally replenished. In contrast, fossil fuels are a finite resource that take millions of years to develop and will continue to diminish with use. Green energy sources also have a much smaller impact on the environment than fossil fuels, which produce pollutants such as greenhouse gases as a byproduct, contributing to climate change. Gaining access to fossil fuels typically requires either mining or drilling deep into the earth, often in ecologically sensitive locations. The ecosphere over is obsessed by energy, whether in the form of predetermined resources such as coal, oil and gas or green resources such as hydroelectric, wind, solar and biomass energy. Energy generation and consumption powers the nation’s financial wealth. Energy also has significant impact on the quality of a country’s air, water, land and forest resources.

In economic terms, India has a steeply increasing GDP growth and an expanding economy. While the Indian economy generates most of its income from services and industries, more than 70% of the total population live in rural areas and depend primarily on non-mechanised agriculture for sustaining their

ISSN: 2233-7857 IJFGCN

living. The predominant fuels used in rural India are solid traditional biofuels such as fuel wood, dung and agricultural residues which are assumed to have high impacts on human health

Unconventional financial prudence is already turning to green sources of energy and it makes sense for developing financial prudence to do the same, unless they're limited by urgency. Researchers of the paper believe that, the green energy is the better option to help strengthen in rural areas. That's why it's imperative to highlight and explain the innumerable green energy products for rural regions and financial growth opportunities to the people through these products.

The main aim behind this paper is to identify various types/sources of green energy to give financial, social, political and regional development goals to the rural areas.

TYPES OF GREEN ENERGY SOURCES:

Green energy is energy generated from natural resources—such as sunlight, wind, rain, tides and geothermal heat.

Solar Energy:

Solar energy can be engendered from sunlight. This can be transformed into heat energy. Solar cells are used to transform direct sunlight into electricity. Now a day's solar power is acknowledged as reshaping market.

Generally usage of solar energy is - to heat homes and businesses, to warm water, to power devices.

Solar energy is pollution free.

Benefits

- Sunlight is functionally ceaseless.
- Can mend public health and environmental conditions.
- Solar energy could also eradicate energy costs.
- Condense energy bills.
- Many federal local, state, and federal governments also incentivize the investment in solar energy by providing rebates or tax credits.

Wind Energy:

Wind farms imprisonment the energy of wind stream by using turbines and converting it into electricity. There are numerous forms of systems used to transform wind energy. Commercial grade wind-powered generating systems can power many different organizations, while singlewind turbines are used to help supplement pre-existing energy organizations. Another form is utility-scale wind farms, which are purchased by contract or wholesale. Precisely, wind energy is a form of solar energy. It doesn't pollute the air like other forms of energy.

Benefits

- It is known as a clean energy source.
- Wind energy doesn't produce carbon dioxide, or release any harmful products.
- Investment in wind energy technology can also open up new avenues for jobs and job training.

ISSN: 2233-7857 IJFGCN

Hydroelectric Power:

Dam is well known term when it comes to hydroelectric power. Water flows through the dam's turbines to produce electricity, known as pumped-storage hydropower. Run-of-river hydropower uses a channel to funnel water through rather than powering it through a dam.

Benefits:

- Hydroelectric power is very versatile and can be generated using both large scale and small scale projects.
- Hydroelectric power does not generate pollution.
- It is known as environmentally-friendly energy option for environment.

Biomass Energy:

Bioenergy is a green energy derived from biomass. Biomass is organic substance that emanates from in recent times living plants and organisms. Various methods are available in nature to engender biomass. It can be engendered by burning biomass, or yoking methane gas which is produced by the natural decomposition of organic materials in ponds or even landfills.

Benefits:

- Create a balanced atmosphere.
- Biomass can be used for personal and businesses use.

Geothermal Energy:

Geothermal heat is heat that is trapped beneath the earth's crust and from radioactive decay. Examples of the same are volcanic eruptions and geysers. This heat can be apprehended and recycled to create geothermal energy by consuming steam that comes from the heated water pumping below the surface, which then rises to the top and can be used to operate a turbine.

Benefits:

- It has a substantial prospective for energy supply.
- It verdures very little footprint on land.
- Geothermal energy is naturally restocked
- Does not run jeopardy of diminishing.

Ocean:

Both thermal and mechanical energy can be produced with ocean. Ocean thermal energy relies on warm water surface temperatures to generate energy through a variety of different systems. Ocean mechanical energy uses the ebbs and flows of the tides to generate energy, which is created by the earth's rotation and gravity from the moon.

Benefits

- Wave energy is predictable.
- Easy to estimate the amount of energy that will be produced.
- Wave energy is much more consistent.

ISSN: 2233-7857 IJFGCN

Hydrogen:

Hydrogen prerequisites to be combined with additional elements, such as oxygen to make water as it do not occur naturally. When hydrogen is separated from another element it can be used for both fuel and electricity.

Benefits

- Hydrogen can be used as a clean burning fuel.
- Known as which leads to less pollution and a cleaner environment.
- It can also be used for fuel cells.
- It can be used for powering an electric motor.

WAYS FOR FINANCIAL ENHANCEMENT IN RURAL AREA THROUGH GREEN ENERGY:

Many of the countries are looking as an earning source towards green energy. Researchers considered that deteriorating price of green energy equipment's has been a godsend for green energy project developers whose installed costs are dropping dramatically. As Carl pointed out, "with the Government intent on providing up to 15pc of energy from green sources by 2020, its little surprise that green energy has got investors hot under the collar".

Here are the some of the options to generate finance through green energy in rural area:

a. Sell the Excess Energy to the Grid

The financial assistance in this instance originates from the customer's energy supplier buying the excess energy off them. By adding more green energy sources to your property, you can sell off the excess energy to surrounding properties or a efficacy company

b. Rent the land for private use.

One can lease out extra space to a private company. In such cases private companies pay to use your land, and they'll bring their own equipment and installers will them. This is the preeminent way to exploit the energy engendering productivity of your land.

c. Expand your land and double the profit

Bigger the land bigger is profit! Rural peoples can buy surrounding land and can gain companies; you'll be encouraging more clean energy in the area. This will definitely deliver extra money off of your green energy land plots.

d. Get Paid for Generating Your Own Energy

Peoples will be paid get paid by energy supplier for every unit of energy generated at home in rural areas. This is a huge advantage and can lead to a big earning for homeowners who are able to generate a lot of electricity. The cost associated with solar panels in precise now.

This can result in very attractive return in little time.

CONCLUSION:

There's no doubt that green energy can help in rural financial enhancement. With suitable management and government support, it can pave the way for financial advancement especially in rural areas. In this

ISSN: 2233-7857 IJFGCN

paper empirical analysis was made to find out various types of sources of green energy. Further, researchers has enlighten on various ways can be used for financial enhancement of rural area with green energy and types of sources. Researchers' of this paper would like to conclude with the words that –Green Energy is a worthy asset to generate finance but at the same time it emanates with a very important advantage that is clean, safe and environment friendly energy that helps to reduce environmental dilapidation and global warming.

REFERENCES:

[1] Arjun Krishnaswami ,**Green Energy Brings Economic Boost to Rural Communities**

[2] https://www.nrdc.org/experts/arjun-krishnaswami/green-energy-brings-economicboost-rural-communities

[3] https://www.ecomena.org/green-energy-rural/

[4] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6175504/

[5] https://www.nrdc.org/experts/arjun-krishnaswami/green-energy-brings-economicboost-rural-communities

[6] How Much Money Can a Solar Farm Make? | YSG Solar, March 20, 2019

[7] https://link.springer.com/chapter/10.1007/978-1-4615-0296-8_15

[8] https://www.greenenergyworld.com/2014/12/26/green-energy-review-financemechanisms/#gref

[9] 7 Types of Green Energy: The Future of Energy, November 2018 Audry Black

[10] https://www.banklesstimes.com/2018/03/19/how-to-make-money-from-yourland-as-a-green-energy-developer/, Sarah Davies

[11] https://www.ysgsolar.com/blog/how-much-money-can-solar-farm-make-ysgsolar

[12]

ISSN: 2233-7857 IJFGCN