

HUMAN RIGHTS TO UNIVERSAL ENERGY ACCESS AND THE DIFFICULTIES IN ATTAINING IT WITH CURRENT LEGAL AND POLICY PARAMETERS

Written by **Anjali Anil**

3rd year BBA LLB Student, Government Law College Thrissur

ABSTRACT

According to Energy Access Outlook 2017, 1.1 billion people are still lacking electricity and about 2.8 billion are currently living without clean cooking facilities¹. Lack of energy access stifles income generating activities and hampers the provision of basic services such as health care and education. Energy access is not only a critical component of reducing rural poverty and drudgery but also one of the fundamental conditions for holistic rural development. Providing universal access to electricity and clean cooking facilities will result in preventing pre-mature death and pollution and will eventually lead to eradication of poverty, achieving gender equality, improved maternal health, improvement in productivity etc.

Electricity has become one of the basic amenities like food and water. Access to electricity is a legal right and its denial will amount to violation of human rights. Over the past 60 years India has taken rapid strides in the development of electricity both in terms of enhancing power generation as well as in making power available to widely distributed geographical boundaries. Even in the presence of Electricity Act 2003 and several other legislations still the task of transforming the power sector is yet to be achieved. India's energy sector is increasingly unable to deliver a secure supply of energy and growing demand and fuel imports.

According to UDHR everyone has the right to an adequate standard of living and universal access to energy services is acknowledged as a component part of this right. But till date there are no international treaties that specifically refer to access to energy services as a right.

¹ <http://www.encyclopedia.com/environment/energy-government-and-defences-magazines/united-nations-world-comission-environment-and-development-wced-our-common-future-report-1987>

Considering energy access as a human right will impose obligations on states both at national and international level.

This paper is focusing upon

- Hurdles in attaining universal energy access
- Alternatives for sustainable development in energy field
- Human Rights violations in power sector

INTRODUCTION

Energy access is considered to be a critical element in accelerating economic growth and achieving higher standard of living. According to World Commission on Environment and Development, energy is necessary for daily services and a necessity in providing essential services for human life such as cooking, lighting; heating etc. human rights recognise basic needs. Energy has become a basic need akin to water or food which conditions access to other essential services such as sanitation, health care and education. So in order to achieve good standard of living to its citizens a country must ensure energy access to all.

Looking into India, we know, power has been places in the concurrent subjects under the Indian Constitution with centre and state both having jurisdiction. Still modern energy services are denied to rural population. Essentially the challenge lies in how to enhance access to modern energy services particularly for those in rural areas.

As per 2001 census² figure the rural population constitutes over 72% of the total population of the country but only 42-44% of rural households have access to electricity. So this paper is focusing more on the issue that why power to all can't be achieved till now and how it can be made achievable by 2030. And also energy field is an area which causes so many human rights violations. So how sustainable energy can be made without violating human rights is also a question to be answered.

BARRIERS IN ACHIEVING UNIVERSAL ENERGY ACCESS AND ITS SOLUTIONS

² http://censusindia.gov.in/Censua_and_you/availability_of_eminities_and_assets.aspx

When we look into India's power sector, we can see that since independence, the installed power capacity has increased from 1362 MW to over 100,000 MW and more than 500,000 villages have received electrification. But the fact remains that annual per capita consumption of electricity is the lowest in the world at about 350 kWh. Keeping in mind that universal power supply is considered to be the primary objective of a welfare state The Electricity Act 2003 was enforced by the union government on 10 June 2003. As rural electrification is being viewed as a prime mover of rural development, Section 5 of the Act provides for a "National Policy on electrification and local distribution in rural areas." The end users of electricity has confronted with frequent power cuts both scheduled and unscheduled. Power cuts, erratic voltage levels and wide fluctuations in the frequency of supply have added to the power woes of the consumer.

So, inadequate, erratic and unreliable power supplies are the reasons that stand as a hindrance in attaining the aim of universal energy access. And all these reasons are caused due to

- Inadequate power generation capacity
- Lack of optimum utilisation of existing generation capacity
- Inadequate inter-regional transmission link
- Inadequate and ageing sub-transmission and distribution network leading to power cuts and local failures
- Large scale theft and skewed tariff structure
- Inefficient use of electricity by end consumer

In order to solve all these issues a clear action plan has to be formulated. India being a vast country where every region is endowed with different resources, an integrated approach will lead to greater and efficient utilization of resources. With the objective of developing an integrated approach and broad vision for the entire nation, Electricity Act directs the Union Government and other agencies to develop national policies on important aspects of power sector.

The Act directs following plans and policies shall be notified from time to time –

1. National Electricity Policy (section 3)
2. National Tariff Policy (section 3)
3. National Electricity Plan (section 3(4))

4. National Policy permitting stand-alone system for rural areas (section 5)
5. National policy on rural electrification and local distribution in rural areas (section 4)

Rural areas need electricity not only for household needs but also for irrigation, cottage industry and so on. Rural electrification will help to meet these needs and the result can be seen on improved farm productivity, health and education. Development of rural electrification has five major facets –

1. Setting up of rural electricity infrastructure
2. Providing connectivity to households
3. Adequate supply of desired quality of power
4. Supply of electricity at affordable rates
5. Providing clean and sustainable power in efficient way.

There are some factors that stand as a barrier in achieving rural electrification. And they are –

- High cost of grid extension
- Low recovery due to highly subsidised tariff
- Low level of tariff collection resulting in negative return
- Supply rationing due to non- availability of power
- High operation and maintenance cost.

India being a vast country with a large rural hinterland, grid power is not very efficient. Decentralized Power generation can mean more efficiency because they will have short distribution lines. In fact localized power generation is the need of the hour. Putting expensive transmission lines across the length and breadth of India is too expensive, which is coupled with the high loss of electricity in transmission and theft. To cater the needs of these remote areas Section 4 of the Act states –

“The Central Government shall, after consulting with the State Governments prepare and notify a national policy, permitting stand-alone systems (including those based on renewable sources of energy and other conventional sources of energy) for rural areas.”

The use of renewable sources of energy and other conventional sources will protect the ecology of the rural areas. The important renewable energy sources, which can be utilised in our country is-

1. Solar energy: solar thermal power and solar photovoltaic power, solar energy direct

2. Hydroelectric power
3. Wind energy
4. Biomass power
5. Wave energy etc.

Evolution of renewable energy technologies and products have now opened a new frontiers for renewable energy based rural electrification using solar lighting projects, DC and AC mini grids, smart micro grids and eventually grid interactive micro and mini grids which can complement the grid extension program. One major advantage with the use of renewable energy is that as it is renewable it is therefore sustainable and so will never run out. Renewable energy facilities generally require less maintenance than traditional generators. Their fuel being derived from natural and available resources reduces the cost of operation. Even more importantly, renewable energy produces little or no waste products such as carbon dioxide or other chemical pollutants, so has minimal impact on environment. So by developing renewable energy sources, we can walk towards energy independence. As every coin is having two sides renewable resources has also got a disadvantage the most obvious and widely publicized barrier to renewable energy is cost – specifically capital cost or the upfront expense of building and installing solar and wind farms. Like most renewable sources, solar and wind are exceedingly cheap to operate – their fuel is free and maintenance is minimal so the bulk of expense comes from building the technology. So massive investment in generating capacity is needed to resolve the energy shortages but SEBs are not in the position to invest funds into generation. In this background the Act of 2003 has bought license free generation of electricity. Moreover captive generation is being freely permitted. And By virtue of Section 7 of the Act Generation of electricity has been de-licensed. However technical standard as to grid connectivity and as to environment must be satisfied.

HUMAN RIGHTS VIOLATIONS IN POWER SECTOR

The UN has declared the year 2012 as the International Year for Sustainable Energy for All³ presenting the opportunity to leaders from business, government, international organisations and civil society to develop and lunch a global energy initiative. The initiative seeks to achieve the goal of Sustainable Energy for All by meeting three interlinked global targets by 2030.

³ <https://www.un.org/en/sections/observances/international-years/>

- Ensuring universal access to modern energy services
- Doubling the global rate of improvement in energy efficiency, and
- Doubling the share of renewable energy in the global energy mix

As stated by General Ban-Ki-moon, “Energy is the golden thread that connects economic growth, increased social equity, and an environment that allows the world to thrive.” Although energy itself is not a basic human need, it is critical for the fulfilment of all needs. Lack of access to diverse and affordable energy services means that the basic needs of many people are not met. Energy services are a crucial input to the primary development challenge of providing adequate food, shelter, clothing, water, sanitation, medical care, schooling and access to information. Energy also fuels productive activities such as agriculture, commerce, manufacture, industry and mining. Lack of energy access contributes to poverty and deprivation and can contribute to economic decline. The lack of access to modern energy services is detrimental to women and children in developing countries. A study conducted by United Nations Fund for Women, relates how women in Sierra Leone spend days in the forest without tools, breaking firewood off their bare hands and carrying it home on their backs. The acquisition of fuel for cooking prevents women from engaging in income producing activities and also leads to further health problems. As many as two million people die prematurely each year from exposure to indoor air pollution. Children’s educational needs also suffers as there is little time available for education the fact that lack of home electric lighting means that study is effectively impossible after nightfall. The Millennium Development Goals developed from the United Nations Millennium Declaration of 2000 are as follows: eradicating extreme poverty and hunger, achieving universal primary education, promoting gender equality and empowering women, reducing child mortality, combatting HIV, malaria and other diseases, ensuring environmental sustainability, and developing a global partnership for development. The disappointment was that access to energy was not specifically mentioned anywhere in the MDG. In reality, however, access to energy services is an essential prerequisite to the achievement of all the stated goals.

In 2011, the UN Human Rights Council unanimously endorsed the UN Guiding Principles on Business and Human Rights, the first international instrument to assign companies the responsibility to respect human rights. The power and utilities sector comprises a wide range of business and activities, from energy developing to power producing and it can have some probable impacts on human rights. Some of them are described below

1. Emergency Response and Community Safety- from natural disasters to hazardous waste spills, power and utilities companies have the potential to profoundly affect communities near their operations.
2. Health and safety – acute health and safety risks are common in the power and utility sector, including hazards such as electrocution for grid operators, exposure to toxic substances for waste pickers, and inadequate protective equipment for hired employees.
3. Land acquisition and resettlement- power and utilities infrastructure may require land acquisition. This carries the risk that local communities may not be adequately consulted or compensated. Indigenous communities are particularly vulnerable to these impacts

The impacts mentioned above will violate certain human rights and they are, Right to life liberty and security of person⁴, Right to adequate standard of living for self and family⁵, right to health⁶, right to own property⁷.

CONCLUSION

The total demand for electricity in India is expected to cross 950000 MW by 2030. Renewable forms of energy, especially solar, wind and hydropower, could contribute to India's energy needs. In case India has to switch from coal, oil and natural gas, it is possible that 70% of electricity could be derived from renewable resources by 2030. Realising the need to generate more electricity from clean energy sources, a renewable power production target of 175000 MW is projected for the year 2022 by the Government of India, out of which solar power will have a share of 100000 MW followed by 60000 MW from wind energy, 10000 MW biomass energy and 5000 MW of small hydro projects⁸. Comparisons of cost per kilo watt hour of electricity produced show that newly build solar and wind plants are already considerably cheaper than nuclear plants. In coming years solar and wind energy will compete more favourably with conventional energy generation. India's ocean resources for energy development remain untapped as of now, though a coast line of 7500 km can be utilised and

⁴ UDHR Article 3; ICCPR Article 6,9

⁵ UDHR Article 25;ICESCR Article 9

⁶ ICESCR Article 12

⁷ UDHR Article 17

⁸ Reports on India's power sector

geothermal energy sectors can also supply the future energy needs. Violation of human rights in energy field can be reduced by bringing up new legislations. . So with the use of renewable resources we can expect that universal access to energy can be achieved within 2030 with due consideration to human rights. So let that be a golden year with lights is all homes and smile in all faces.

