

① How Energy Security can help tackle future pandemics and how pandemics can hamper Energy Security (150 words)

Ⓐ Covid-19 has exposed loopholes and weak areas in the citizen services delivery system in our country. Energy is the backbone of the economic development of a country. Accessibility and affordability to energy impacts the living standards and lifestyle of the public. In India 304 million people have no access to the electricity.

Energy security is all about availability, accessible and affordability of energy to the public.

During the situation of pandemic, it is very difficult to serve the needs of the citizens.

Energy security can help tackle future pandemics in the following essential services.

i) Health Sector :- Health sector plays pivotal role during pandemics to minimize the loss. However, its function requires energy i.e. power. Most of the equipment in hospitals such as ventilators, oximeters etc and equipment in diagnostic centers need electricity. Hence, even though we have doctors, hospital, we need power to effectively serve the needs of patients.

ii) Education Sector :- As, physical mode of classes not possible, online mode of delivery of lectures has gained importance. For un-interrupted delivery we need electricity for electronic gadgets. Hence, power needed for functioning as well as to provide internet connectivity from telephone towers. Non-availability can take away the access to education.

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ii) Communication :- During pandemics, communication is like blood. It is through news-channels and social media public can become aware of what's going on and share the information regarding what care should be taken etc. Here energy powers the communication, without energy, no communication and it puts citizens in isolation.

iv) Agriculture :- In farming electricity is used to supply of water to the crop. Non-availability of coal electricity could affect water supply thereby impacts production and productivity of the crop. This creates supply-demand & mismatches and led to inflation which is not desirable in pandemic situation where people usually do not have income sources.

How pandemics can hamper energy sector security

i) Thermal power :- Thermal power occupies major chunk in energy-mix of India. Nearly 75%. Contributed by thermal power. It is the sector where work from home is not possible. So, health concerns of workers may increase absenteeism which impacts supply of power. Thereby makes supply critical and increases price.

ii) Imports :- India depends on imports for 80% of its oil needs, pandemics may cause non-availability of raw-material and supply shortages. This makes cost-of-production to increase. Thereby makes it unaffordable.

iii) No Gas pipeline :- During pandemics, physical transport will be impacted. Also India has less pipeline infrastructure. So, physical delivery is must. Due to this accessibility to the gas cylinders will be critical.

Conclusion :- India should move to renewable sources like solar, wind where human requirement is almost nil. Also, gas based economy and gas pipeline projects can help to tackle pandemics in future.