

1- In  
2- Expansion  
3- Allocation  
(debt)  
9/10/23

Q Explore the option of alternative energy resources to overcome energy crisis in Pakistan.

Answer

Introduction

Try to link your quotes with the arguments

"Energy crisis is a massive threat to economy."

(- Tahir Hussain)

Pakistan has been facing energy crisis since 2007. In fact, energy crisis is become a big problem. However, alternative source of energy, crisis will be reduced. Therefore, Pakistan should get abrupt access to energy resources.

2- Energy crisis - a massive electric short fall: an Overview

"Energy crisis leads to excessive loadshedding."

(- Faisal Bari)

Unfortunately, Pakistan has been facing energy crisis since 2017. In fact, loadshedding



is increased due to energy crisis.

" In 2022, the worst year of loadshedding was recorded; in rural it was prevailed about 16 to 18 hours, and

in urban it was 8 to 10 hours."

(- Excessive loadshedding, Fairal Bari, 2022)

Moreover, cost of energy per unit is also increased.

" The cost of domestic per unit reached at 34 PKR, and

cost of commercial per unit reached at 64 PKR."

(- Pakistan Bureau of Statistics, 2022)

Hence, the worst energy crisis is recorded in Pakistan.

Excessive Loadshedding

Rural  
(8 to 10 hours)

Urban  
(16 to 18 hours)



Cost of energy per unit

Commercial Unit

64 PKR

Domestic Unit

34 PKR

### 3- Alternative Energy Resources to overcome energy crisis in Pakistan

Following is detail of alternative resources:

a) Energy Generation from wind  
Pakistan has potential to generate energy from wind.

(The World Bank, 2022)

Pakistan can generate adequate energy from wind. In fact, coastal areas of Sindh



and Balochistan has such capacity.

"Almost 3,000 MW of energy can be generated from wind."

(- Economic Survey, 2019)

Therefore, Pakistan can produce energy from wind source.

b) Energy Generation from Solar power

Along with wind, Pakistan can also produce energy from solar source. In fact, Pakistan has potential to generate solar energy yearly. According to Economic Survey,

"Pakistan can generate 900 MW of energy from solar source and

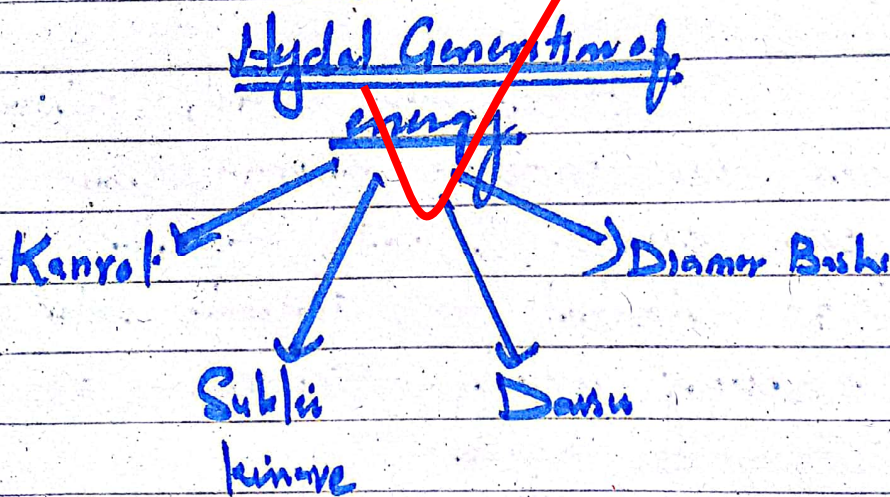
Quaid-e-Azam Solar power station is named in Bahawalpur."

Therefore, Pakistan can also produce energy from solar resource.



c) Hydel Generation of energy  
"Pakistan can reduce its scope of dependency on hydrocarbon due to hydel generation."  
(- Irrigation Department, 2010)

Following are further sources of hydel energy generation:



i) Energy capacity of Korrot source  
hydel generation is one of alternative resource of energy generation. Pakistan can produce abundant energy from it.

'About 730 MW of energy is produced



from Karachi.

(Economic Survey, 2020)  
Thus, Pakistan can produce energy  
from hydro source.

ii) **Energy Capacity of Sukkur Kinaro**  
Moreover, Pakistan can

also produce energy from Sukkur  
Kinaro. Tremendous amount  
of energy is produced from  
Sukkur Kinaro source of hydro  
energy. According to economic  
survey

"Almost 883 MW of  
energy is produced from  
Sukkur Kinaro."

(Economic Survey, 2020)

Hence, Pakistan can produce  
adequate energy from Sukkur  
Kinaro.

iii) **Dams hydro power projects = energy  
generation**

Further, Pakistan can  
also produce tremendous energy



from Dasu hydropower projects.  
An adequate energy generation  
is observed from dams.

"Capacity of Dasu hydropower  
project is about  
4,300 MW of energy."

(- Irrigation Department, 2007)

Therefore Pakistan can generate  
sufficient energy from Dasu  
hydro-power project.

iv) Diamer Basha - hydropower energy  
capacity and generation

"Dams are adequate  
sources of energy generation."  
(The World Bank)

Diamer Basha is a big source  
of energy generation in Pakistan.  
The capacity of energy  
generation of Diamer Basha is  
high.

"Almost 4,500 MW of  
energy can be produced  
from Diamer Basha."

(- Irrigation Department, 2007)



Therefore, Pakistan can also produce sufficient alternative energy from dams.

## Hydel Energy Capacity

Karrot  
(730 MW)

Sulki Kinwe  
883 MW

Hydel (Dam)  
4300 MW

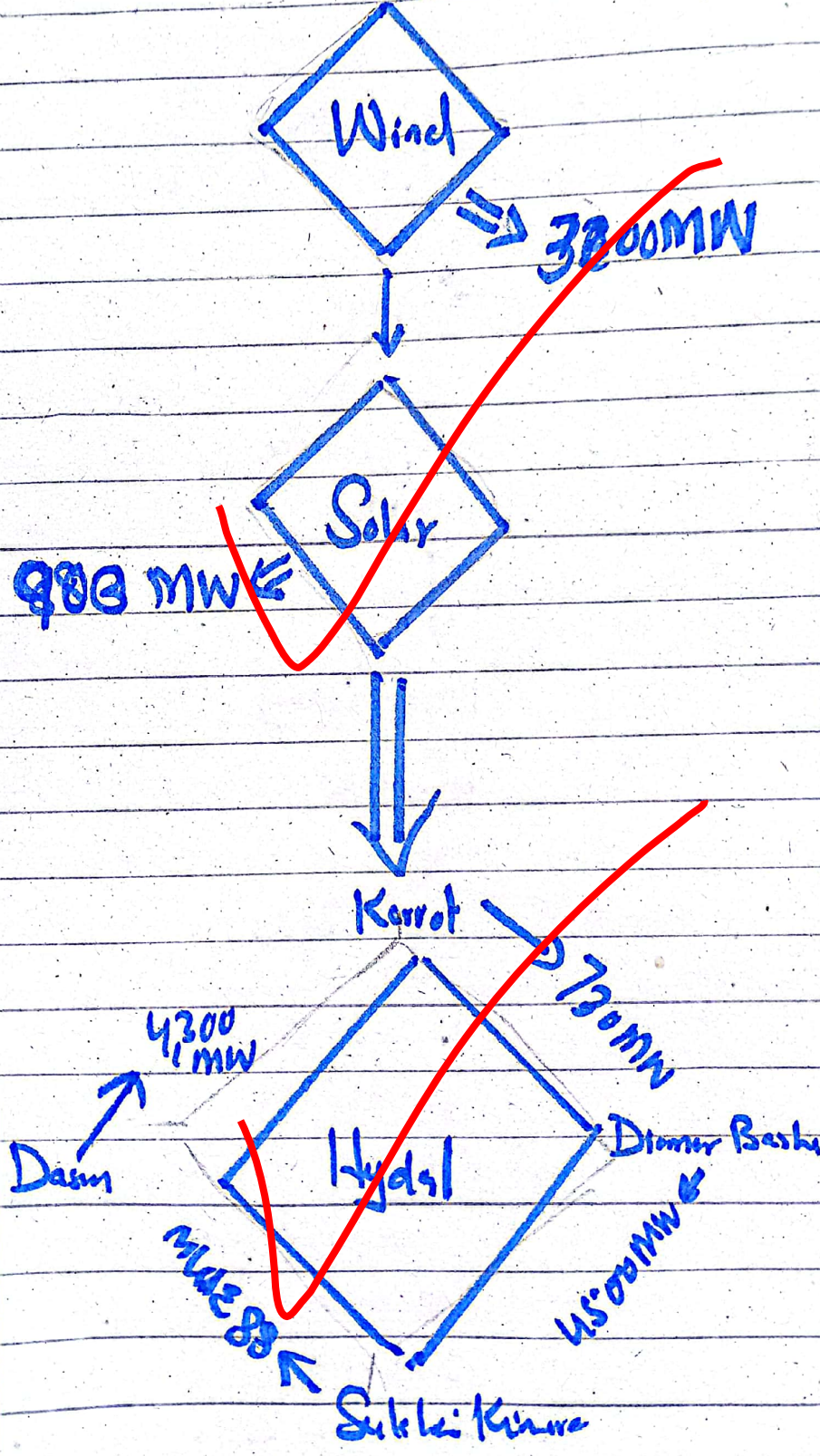
Diamer Basha  
45,100 MW

"Almost 60% of energy will be produced from hydel source by 2030."

(Pakistan Bureau of Statistics, 2012)



Flow Chart of Alternative Source of energy





4-

Conclusion

"Pakistan has a tremendous potential of generation of renewable energy sources."

(-The World Bank)

Pakistan has been facing energy crisis since 2007. Resultantly the worst energy crisis results excessive load shedding. Therefore, alternative energy resources will help in eradication of energy crisis.

You have uploaded the same question twice  
Add more points on alternatives