6. Highlighting the existing gaps in the South Asian energy cooperation, bring out the steps taken by India to promote energy cooperation with its neighbours. (150 words) 10

Approach:

- Introduce by mentioning the need for energy cooperation in the South Asian region.
- Explain the gaps in the current South Asian energy cooperation.
- Mention the steps taken by India to promote energy cooperation with its neighbours.
- Conclude appropriately.

Answer:

The need for energy cooperation in the South Asian region arises from the **mismatch between** energy demand and resource endowments. For instance, India, Pakistan and Bangladesh account for the major share of natural gas and coal resources in the region. However, these countries are also large in terms of area as well as population thereby increasing the resource demand. Bhutan and Nepal, on the other hand, have hydropower potential in excess of their demand for electricity.

Sri Lanka and Maldives being island nations also have their unique potential and challenges in this context.

Existing gaps in South Asia's energy cooperation:

- **Resource constraints**: While coal is abundant in India, Bangladesh and Pakistan, it is not considered a fuel of the future due to its pollutant effects. On the other hand, while gas is comparatively a cleaner hydrocarbon, supplies are depleting in Pakistan and Bangladesh.
- **Mobilising financial resources** to develop the necessary energy infrastructure is a major challenge to enhance energy security in the region. One of the major reasons for this is state-centred approach and the use of public sector enterprises.
- Lack of diversification of fuel basket: Overreliance on a single fuel source leaves countries vulnerable to disruptions caused by market and technological failure as well as sabotage. India, for instance, is heavily dependent on coal, Bangladesh and Pakistan on gas, and Bhutan and Nepal are predominantly hydro-based energy generators.
- **Limited focus on renewable energy**: Despite abundant renewable sources available across the region (e.g. Afghanistan), they have not been efficiently tapped.
- **Slow progress on regional and multilateral projects**: For instance, proposals to undertake multilateral cooperation on harnessing the hydropower potential of the GBM basin have existed for decades but these projects remain in the discussion stage.

India is the largest consumer of primary energy in the region and in the last seven years, India's renewed enthusiasm for regional energy cooperation in South Asia has led to concrete progress on multiple cross-border energy projects.

Various steps taken by India to promote energy cooperation with its neighbours are:

- Energy cooperation in South Asia has occurred at the bilateral as well as regional level 2014 **(SAARC Framework Agreement for Energy Cooperation).** But bilateral energy cooperation has been more successful, particularly between India and other SACs.
- India and Bhutan: India has provided technical and financial assistance to Bhutan in the development of hydropower. Bhutan exports about 1,000-1,200 megawatts (MW) surplus power to India. The first ever Clean Development Mechanism (CDM) benefits were realized by India-Bhutan hydro trade in 2010.
- India and Bangladesh: They have signed a memorandum of understanding (MoU) under which 100 MW power will be exported to Bangladesh. India Is assisting in the construction of Roopur Nuclear Power Plant and the Rampal Thermal Power Plant is an example of partnership in the area of energy.
- India and Nepal: Four hydroelectric schemes with an aggregated installed capacity of about 50 MW have been implemented in Nepal with assistance from India.
 - The two countries have also signed an agreement worth US\$1.04 billion under which a 900MW plant will be built on the Arun River.