PM MODI LAUNCHES POWER, URBAN PROJECTS IN KERALA

TAGS: GS-3: Economy, Infrastructure, GS-2: Polity, Centre-State relation

CONTEXT:

- Prime Minister Narendra Modi on Friday inaugurated a **bevy of infrastructure projects in Kerala**, including the 2**,000-MW Pugalur-Thrissur high voltage direct current (HVDC) power transmission corridor.**
- **Federal structure of Polity:** Chief Minister P. Vijayan said that **in a federal structure**, it was imperative that **governments at various levels work together** for the **benefit of the people**.

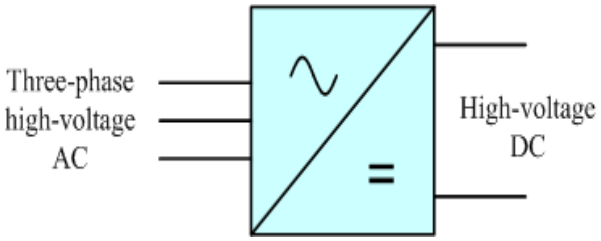
DEVELOPMENT AS RELIGION: INFRASTRUCTURE PROJECTS

- "The great **Malayalam poet Kumaranasan** said, 'I'm not asking your caste, sister, I ask for water. I'm thirsty'. **Development and good governance do not know caste, creed, race, gender**, religion or language. **Development is for everyone."**
- Stating that "**development is our aim, development is our religion**," the Prime Minister also inaugurated,
  - A 50-MW **solar park in Kasaragod** and
  - A 75-mld (million litres a day) **water treatment plant** at Thiruvananthapuram, and
  - Two **Smart City Mission initiatives** in the capital — the ₹427-crore 37-km **Smart Road project** and the **Integrated Command and Control Centre** at the City Corporation.
- **Blue Economy:** Government was giving utmost importance to the blue economy. Development strategies targeting the fishermen community were based on
  - "**More credit,**
  - **Increased technolog**y,
  - Top-quality **infrastructure**, and
  - Supportive government **policies**".
  - To ensure that India became a **hub of seafood exports**.

NATIONAL GRID LINK: PUGALUR-THRISSUR HIGH VOLTAGE DIRECT CURRENT (HVDC) POWER TRANSMISSION CORRIDOR:

- Power transmission corridor would ensure the **transfer of a large quantum of power** from the **national grid to the State** and guarantee **reliable access to electricity**.
- The Pugalur-Thrissur line is **Kerala's first HVDC** inter-connection with the national grid and the **country's first system** to use the **voltage source converter technology**.

HIGH VOLTAGE DIRECT CURRENT (HVDC):



- An HVDC converter **converts electric power**
  - From **high voltage alternating current (AC)**
  - To high-voltage direct current (HVDC), or vice versa.
- HVDC is used as an **alternative to AC** for transmitting electrical energy **over long distances** or between AC power systems of different frequencies.
- Almost **all HVDC converters** are inherently **bi-directional**; they can convert either from AC to DC (rectification) or from DC to AC (inversion).

VOLTAGE SOURCE CONVERTER TECHNOLOGY (VSCT):

- Voltage Source Converters (VSC) are **a self-commutated converters** to **connect HVAC and HVDC** systems using devices **suitable for high power electronic applications**, such as Insulated Gate Bipolar Transistors (IGBTs).
- VSCs are capable of self-commutation being able to generate AC voltages without the need to rely on an AC system.

SOURCE: The Hindu

MCQs:

Q. Consider the following statements.

1. An HVDC converter converts electric power from high voltage alternating current (AC) to high-voltage direct current (HVDC), or vice versa.
2. High voltage direct current (HVDC) is used as an alternative to AC for transmitting electrical energy over short distances.

Which of the above statements is/are correct?

a) 1 Only
b) 2 Only
c) Both 1 and 2
d) Neither 1 nor 2

ANS: A