Observation summary from SIP grid integration pilot project at Kalinathpur, Mirpur, Kushtia (January - December 2020)

Summary Result:

- O SIP grid integration pilot project has been successfully operating since 4th of November 2019. The install capacity of the SIP was 24.45 KW.
- O Total solar energy production from the system in 2020 (January 2020 -December 2020) was **25501kWh**
- O Total solar power used for irrigation from the pilot project during this time was 15992kWh
- O Total solar power exported to the grid from the pilot project in 2020 was 9509kWh
- Approximately 37% of generated solar power was fed to grid. Remaining solar power (62%) used for irrigation and self-consumption.
- Self-consumption of grid-tie inverter from grid varies with the irrigation demand and It was approximately 1% of exported energy to the grid from the project.

Monthly energy data

| Month | Jan-20 | Feb-20 | Mar-20 | Apr-20 | May-20 | Jun-20 | Jul-20 | Aug-20 | Sep-20 | Oct-20 | Nov-20 | Dec-20 | Annual |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Grid Feed | 670 | 612 | 1371 | 201 | 721 | 1000 | 1105 | 311 | 538 | 1640 | 837 | 503 | 9509 |
| Self-Consumption | 11.92 | 10.93 | 10.71 | 12.57 | 10.46 | 7.81 | 10.51 | 12.46 | 11.92 | 10.85 | 10.38 | 11.65 | 132 |
| Used for irrigation | 1872 | 1389 | 1481 | 2559 | 650 | 0 | 1034 | 1549 | 2000 | 1064 | 1235 | 1159 | 15992 |





