

# Fuel for Irrigation

## Level A

In Level A, it is assumed that only 20 percent of pumping demand will be met through solar and 70 percent through electricity grid. Diesel will continue to be used as a back-up and will meet 10% of energy requirement.

## Level B

Due to government policies like fiscal support for solar water pumps and complete deregulation of diesel prices, share of diesel will decrease gradually and the share of solar based agricultural pumping will increase up to 30 percent.

As on 31<sup>st</sup> March 2015, there were 5.15 lakh agricultural pump sets installed in the state, out of which 3.67 lakh were in operation. The average efficiency of pump-sets remains low at 30-35 percent and offers significant scope for savings. The aggregate pumping demand in 2015 was 0.4 TWh. About half of this demand is estimated to be met by diesel pump sets and remaining by electric pump sets. Under MNRE Scheme, the state is also promoting use of solar pump-sets for agriculture and micro. The share of each fuel, i.e. diesel, electricity, and solar PV in overall pumping requirement is defined as a choice variable, ranging from 1 to 4.

## Level C

Level C assumes that diesel will not be used for pumping due to increase in reliability of electricity supply from grid. Further share of solar energy based pumping will increase up to 40% due to fiscal support from state government.

## Level D

Prices of solar energy based pumping will decrease sharply, due to which share of solar energy based pumping will be 50%. Diesel will not be used for agriculture pumping due to high prices. Only 50% of energy demand will be met through grid.

Share of different fuels

