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.

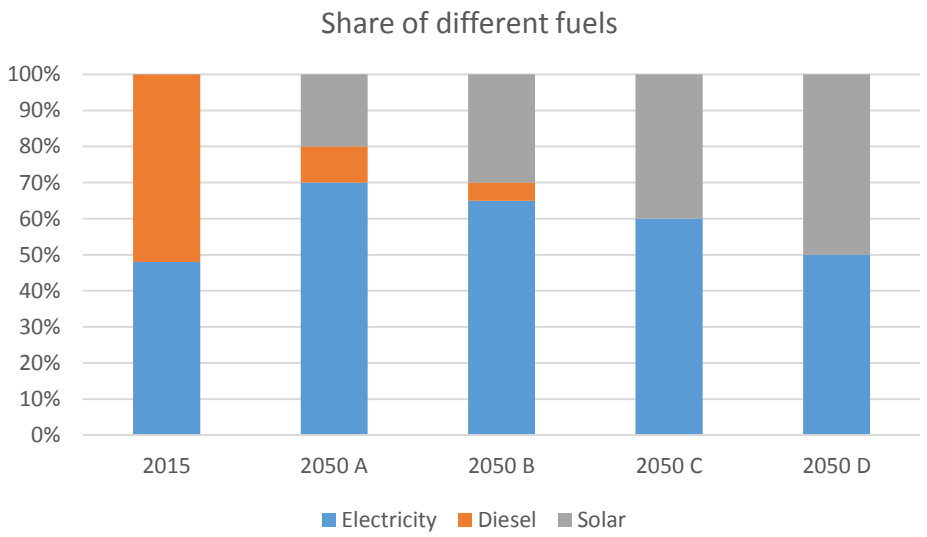
Level B

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

As on 31st 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. Further share of solar energy based pumping will increase up to 40%. This could be because of increased reliability of electricity supply from grid and fiscal support from state government.



Level D

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