

Rural Electrification and Self Employment by integrating Solar farming with Agriculture

Author: Reshma Susan John (rsj@csu.fullerton.edu)

Advisor: Rakeshkumar Mahto (ramahto@fullerton.edu)

California State University- Fullerton

Indian farmers are completely dependent on agriculture for their income and it is common knowledge that farming is a seasonal occupation. This leaves these farmers with close to nothing to fend for themselves, their families and the animals that help them in and around the fields. They ultimately end up committing suicide because they have no food, water and other basics they need to survive. The main aim of this study is to integrate solar farming with traditional. The benefits that solar farming brings to the table are numerous: secondary source of income, panels provide room for better farming techniques leading to better yield and it is a step towards sustainability with the current state of the world. The study is being conducted in the rural areas of Maharashtra, India where the suicide rates are the highest. The design for the solar farm is being developed using the PVsyst software. This software has vast data that helps position the panels in the most optimal direction possible it also provides very accurate numbers in terms of how much energy is being produced. This will help attain a detailed analysis in terms of sustainability, farmer's income and yield.