



## CONSOLATION

Remote controlled valve for diverting water flow in furrow irrigation

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Surendra (21) is a young innovator, who discontinued his studies after class twelve to continue working on his innovation. He has developed a remote controlled system to regulate flow of water in irrigation channels/furrows in fields. This eliminates the need for a farmer to go to the field and close/ open the gates manually.

Born in farming family, Surendra has four siblings. His family wanted him to continue his studies however, innovation has been his passion since childhood and did not want himself to be distracted by anything else. He loves playing with junk material especially related with electronics and make something or the other. At a young age, he had made many small electric-powered machines such as threshing machine, remote controlled switches,



security bracelet, robotic hand, powerhouse and others. Due to his indulgence in his projects, he failed in class eighth and one of his teachers came home inquiring for the reason. He showed him his projects and then told him and his family that his love lies in doing things with hands and not reading books and giving exams. The teacher appreciated his efforts but also suggested him to focus on studies as well.

Surendra kept on working on his various ideas and slowly his family started supporting him as well. His father helped him to set up a small lab in his house. After class twelve, he did not take admission in any college and started his work on innovations though his family wanted him to start a business. He claims to have developed over fifty different kinds of innovative projects and machines. He gets inspired by the problems he sees around or people around him face and uses that inspiration to conceive new ideas and develop new machines/ devices. He has participated in a number of events and won prizes many times. He wants to serve the nation and farmers with his innovations.

The remote operated valve  
Being a farmer's son, Surendra is aware of the problems a farmer faces in farming especially

those related to irrigation. For releasing/stopping water flow in different furrows/ channels in the field, a farmer has to physically go and open/close the water gates manually. This becomes cumbersome especially during nights and in winters. Surendra has developed a remote operated system, using which a farmer can open/close the water gates from a distance

of half a kilometre without physically going to the field. An upgraded version of this remote operated system has been developed by Surendra in NIF's Fab Lab (Fabrication Laboratory) where the opening and closing of gate is automatic depending upon the amount of moisture present in the soil. The prototype is being tested presently.