



**CALIFORNIA STATE SCIENCE FAIR
2015 PROJECT SUMMARY**

Name(s) Sidharth Bommakanti	Project Number S1005
Project Title Wellness Water: Implementation of a Dual-Filtration System to Clarify Domestic Water Sources in Rural Communities	
Objectives/Goals My main goal was to Implement a sustainable, low-cost dual-filtration system to clarify contaminated domestic water sources in rural communities.	
Abstract Methods/Materials I created a slow sand filter bed after getting permission from the Panchayat. Upon completion, I commenced wetland construction. I conducted focus groups to collect data from community members who represent the entire spectrum of socioeconomic backgrounds. I created a high school water quality curriculum to integrate into the existing high school curriculum. All water quality measurements in the field were conducted using the DR890 handheld water quality test kit. Colorimetric assays were used to reveal the presence of nutrients, turbidity levels, pH, and oxygen content.	
Results The sand filter bed created reductions in key contaminants. These numbers will be reduced significantly through the creation of a wetland system. Partnerships have been established with the Panchayat, the CDD Society, Journeyman Internation Inc, and the Kowtaram High School	
Conclusions/Discussion Pilot presentation of high school water sanitation curriculum received overwhelming support from the local government and high school administration. The dual filtration system is both a low cost and sustainable water purification method.	
Summary Statement My project is an attempt to find a way to clarify domestic water sources throughout the world	
Help Received Mrs. Pereira helped with supplies	