

TEAM CORONA: Installing solar water heaters at the Angel's orphanage

In today's world, most appliances and devices run on electricity that is derived from conventional non-renewable sources. They have become vital components of the human life, and hence we cannot reduce our dependency on them. Scientists and environmentalists hence often encourage us to switch to devices running on renewable energy, coming from renewable sources.

Keeping this in mind, we, a group of seven grade nine students, from Vidyashilp Academy, Bangalore, decided to address the SDG 7 (Clean energy), and while doing so, simultaneously address the issue of cold water, at the Angel's Orphanage in Shivajinagar, Bangalore.

The key stakeholders of this project are the members of our group as well as our Faculty advisor. Mrs. Sabina Solomon, who manages the affairs of the orphanage we are planning to help, is also an important stakeholder. The main beneficiaries are the children residing in the Angel's orphanage (50 children + 10 caretakers).

The main goal of our project is to ensure that the children of orphanage receive hot water. We would also like to promote the idea of using renewable and clean energy.

We have executed our project at the Angel's Orphanage, Shivajinagar, Bangalore. They were unable to afford for hot water, due to relatively high electricity bills. Hot water was being looked upon as a luxury because the management of Angels Orphanage prioritizes the funds for the other critical needs of the children such as food, education and medicines. However, with the cold-water showers, small children often took ill. During our discussions with the management, when we visited this Orphanage, we all decided that one of the ways we could help them is to provide for the hot water but using renewable energy in line with the SDG number 7: Clean energy.

There are several key activities that we undertook, as part of this project.

We did an online research and looked at several recommended solar water heater manufacturing companies. We contacted 5 of them: MSIL, Pratham Solar Systems, Trion Solar Company, Kamal Solar, and V-guard. The V-guard company, was very helpful, and they agreed to help us. Their Site manager even visited the orphanage, and the company also agreed to provide an additional discount, considering this instance to be a special case. Though the company gave us their best quote, they have included GST in the cost, and hence the estimate is roughly Rs.50000.

For this system we also had to install a water tank, fabricate a stand for the water tank and install pipes. The total cost came to Rs. 80,000.

We also started a fundraising campaign, for the same. We set up an online fundraising site, using one of the recommended crowdfunding platforms called *milaap.org*. We promoted our campaign, using social media. A special account called *Team.Corona* was created on Instagram, for this purpose. We also promoted our project using Facebook.

Several members of our group, went around their neighborhoods, asking for donations. We also sold slime, in our own neighborhoods and online. We used the Instagram account to take orders for slime.

We raised Rs. 10,000 by selling slime, Rs. 40,000 through the online fundraising site and 30,000 from the door to door fundraising. We've raised a total of Rs. 80,000 (GBP 900) .

We finally installed the solar water heater on 12th March 2019. We hope that the solar structures that we build would be sufficient to heat up water required for the children's needs. We also urge The Government of Karnataka as well as The Government of India to invest in solar energy and provide a solution to the country's needs. We would like to thank all the generous contributors to our fundraising campaign and also our faculty advisor Ms. Asha Kannan for her help throughout the way.

Thank you.

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