



A deeper look at
Co-Creating **Eco-Habitats..**

Organo Newsletter - January 2021

The Organo Experience

Shalini Legala



In fact, after we took a place at Naandi, we pretty much stopped buying vegetables from outside.

We have also made so many friends within the community here, which again has added a lot of value to us as a couple and to our daughter as well.

People spend so much money on going abroad for fancy holidays. But what we found here was indeed something out of the world! After a long hectic week, coming to Naandi is like therapy, just what we need and look forward to every weekend.

As a family, we decided to buy a villa at Naandi, right on our first visit. We could not help it and it felt like love at first sight! I was completely fascinated by the bio-pool.

And it was such a pleasure to watch children play around the pond and catch fish. It was completely mesmerizing.

There is also so much to do here, one never gets bored.

We go on long walks, cycle around and swim in the bio-pool, all of which are totally refreshing. Having our own farm in our backyard is a blessing too. We do not live here full time but can't wait for the weekends to drive over.

We take back with us fresh organic vegetables and milk for the rest of the week.



Solar Water Heater Versus Geyser - Which is Better?

Asphia Taimur

It depends.

Most of the households in the cities are equipped with conventional geysers. However, an increasing number of eco-conscious & wallet-conscious households are installing solar hot water systems on their rooftops.

While solar hot water systems use very little electricity and are a much better solution in terms of reducing footprints on the environment, does it make sense all the time under all scenarios? How do we measure?



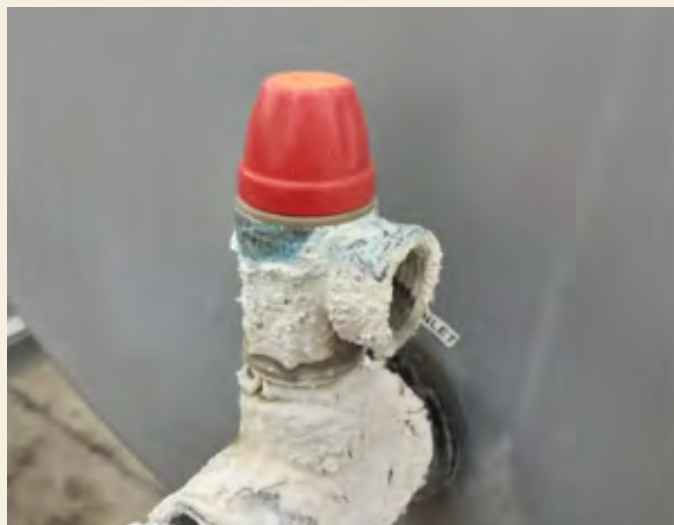
One way of comparing these two systems is doing a life cycle analysis with the cost.

The following comparison has been done for 150 villas as a case study with a capacity of 200 liters per day consumption of hot water.

Sl.No	Details	Conventional Solution	Sustainable solution
	Description	Geysers	Solar Water Heaters
1	Initial Investment Costs	3 Geysers per home X Rs. 15,000 each = Rs. 45,000 X 150 villas = 67.5 lakhs	Rs. 35,000 (200 LPD capacity) X 150 villas = 52.50 lakhs
2	Electricity Running Costs	40 units per month per home X 6.3 Rs X 150 villas = Rs. 37,800	@ 10% of geyser cost = Rs. 3,780
3	Environmental Impact	Water heating is one of the major energy consumption items. Electricity is produced from burning fossil fuels.	Having a solar water heater reduces the electricity produced by burning fossil fuels.
4	For Resident	> Need to pay an approx monthly bill of 350 Rs - 570 Rs (depending on occupancy and usage) > 5 Year Warranty > Need to get repaired after 3 to 5 years costing 1000 Rs. Approx.	No electricity cost for water heating 5 Year Warranty 2000 Rs for 3 months for AMC including descaling, quarterly visits, etc., Spares will cost up to 500 Rs.
5	Pro's		Reduces the electricity used from burning fossil fuels Less Investment
6	Con's	Electricity consumed for water heating is produced by burning fossil fuels	Is not efficient on cloudy and rainy days Occupies roof space.
7	Maintenance	No regular maintenance required	Scaling of water, to be switched off once used

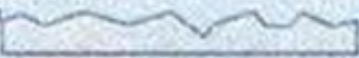


Although the initial cost of both the systems is relatively the same, the solar hot water system performs much better in terms of operational cost.

Another downside of installing conventional geysers is the huge carbon footprint on the environment.



Can there be a situation where geysers are better than solar hot water systems?

Such a situation may arise if the homes are not occupied throughout the year. In such cases, maintenance issues crop up in solar hot water systems because of residual water in the heater contributing to scaling issues which decrease efficiency and require high maintenance and downtime.

Thickness of limescale	Loss of efficiency
1/16" 	12%
1/8" 	26%
1/4" 	40%

Loss of efficiency vs thickness of scaling

If the geysers are powered using solar panels, the carbon footprint reduces and maintenance is also very low.

The verdict is- electric geysers make more sense in a community where units are not occupied every day but in regular homes, solar water heating systems win hands down.

<https://www.venushomeappliances.com/hardwater-protection.html>

My Little Adjustments

Group Captain Ragesh Jain

Initially, we were a bit apprehensive about moving to Hyderabad and to Organo, since I have always lived in cantonments, coming from a complete fauji background. But after we moved into Organo Naandi, we settled in quite effortlessly.

It was hardly an adjustment, even though it was a completely new set up for us, a new language and culture, which was completely different from the typical cantonment. However, the transition was seamless.

When we moved to Hyderabad, we lived at a rather upmarket housing complex where we were adjusting with pretty much everything.



But at Naandi, the people, the environment, the lifestyle; everything seemed in sync.

It is a complete joy living in the midst of nature. We hardly mind the little creatures around. It is all a part of living alongside nature.

Although a bit far removed from the city, distance is hardly a problem. Being a commercial pilot, my workplace is the airport and that is not too far from here. In fact, we do not miss the city at all. When we hit the outer ring road to return home, it is actually a relief! It feels like we are living in a resort. The pristine pollution-free environs here are indeed a rarity, a privilege. I am certain, living here has added years to our lives.



Organo Et School - An Initiative For A Sustainable Tomorrow...



Organo Et School's purpose is nurturing a learning environment for all stakeholders where inclusive holistic eco-living is celebrated.

Commemorating the spirit of Children's Day, Organo Et School conducted a contest inviting students and parents to share their fondest memories, photos, write-up, painting, and more by participating in our "Children's Day Contest". The contest was open to children of all ages up to 16 years. We received an overwhelming response from the young creative talent.

<https://www.organoetschool.co.in/post/childrens-day-contest>

This year we celebrated Children's day and Diwali on the same day. As we belong to a culture that enjoys celebrations, all our festivals are colorful and grand. Despite the pandemic, our festival spirit and energy stayed on.



The joy and delight we experience during such celebrations is huge, however, there is also increasing concern over environmental pollution. Through our contests, articles and eBooks we are bringing social awareness among our readers.

1. [Sustainable Festive Decor](#)
2. [Sustainability day Contest](#)
3. [Food Habits That Reduce Your Carbon Footprint](#)

We are fortunate to be collaborating with experts who not only extend their expertise through workshops but also reach out to the larger audience through experience sharing and talks. One such talk was with Lakshmi Battula, of Sthiranya Ecoscapes, who trains farmers to adopt natural farming over conventional farming techniques. As an expert, Lakshmi has facilitated various experiential learning workshops for Organo Et School.

<https://www.organoetschool.co.in/post/what-is-urban-farming>

To join our cause of Sustainable Living and to know more about our learning initiatives, please reach us at oes@organo.co.in,

call us at # 9154100775 or

visit: <https://www.organoetschool.co.in/>

Want to Save Water? Install Solar

How much water does it take to produce 1 unit (1 kWh) of electricity?

More than 80% of electricity in India is generated by thermal power plants which include fossil fuel, biomass and nuclear energy. These power plants are projected to consume about 9% of all freshwater resources in the next few decades in India.



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More than 80% of electricity in India is generated by thermal power plants which include fossil fuel, biomass and nuclear energy. These power plants are projected to consume about 9% of all freshwater resources in the next few decades in India.

For every kWh (1 unit) of energy consumption, freshwater withdrawal is 18.9 liters out of which 2.2 liters is consumed. This is on an average with some power plants being more efficient and some being far worse.

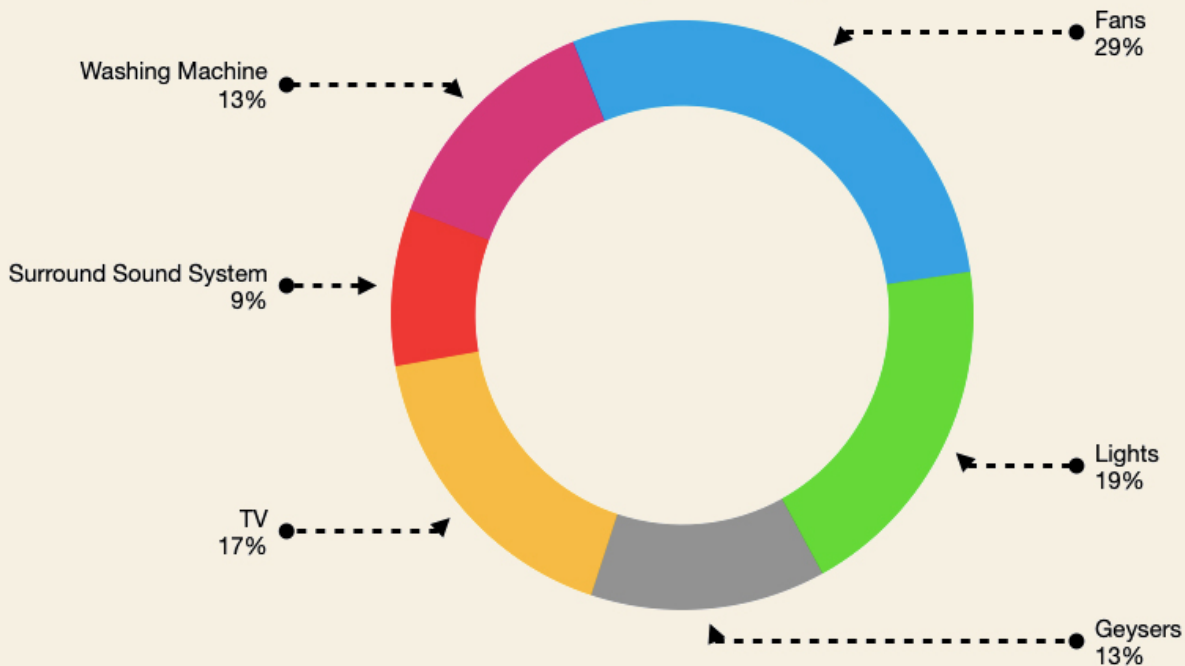
What this translates to is water consumption of around 51 liters per day for the amount of energy that a typical 3-bedroom villa consumes. That is the water footprint for energy consumption.

International Renewable Energy Agency & World Resources Institute. (n.d.). Water Use In India's Power Generation: Impact of Renewables and Improved Cooling Technologies to 2030. IRENA.

<https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2018/Jan/IRENAIndiapowerwater2018pdf.pdf>

World Resources Institute. (2018, January). PARCHED POWER: WATER DEMANDS, RISKS, AND OPPORTUNITIES FOR INDIA'S POWER SECTOR (No. 1). WRI. <https://wri-india.org/resources/publications/parched-power>

Water Consumption in a typical villa



*This chart shows water footprint as percentage for different devices in the house
Some other disadvantages are the quality of water that is put back into the freshwater resource and
the negative effects of high temperature water on the biodiversity in these freshwaters.*

One straight-forward way in which our energy footprint can be reduced is by using solar panels which do not have as much water during their operations as a thermal power plant. Whatever water is consumed is due to regular cleaning of the panels which is required to maintain the efficiency of power generation



Rurban Nest Construction Updates

Nizamabad' first eco-community, Rurban Nest is shaping up well with the construction work going on in full swing. Multiple level activities are going on simultaneously through the hands of skilled personnel. The basement and foundation works are taking place at the north side villas and slab laying work is in progress at the eastern side. For the clubhouse area, beams are getting placed.

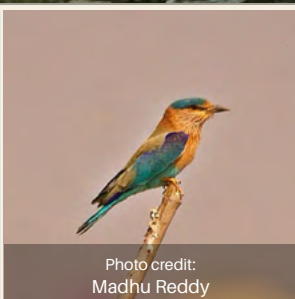
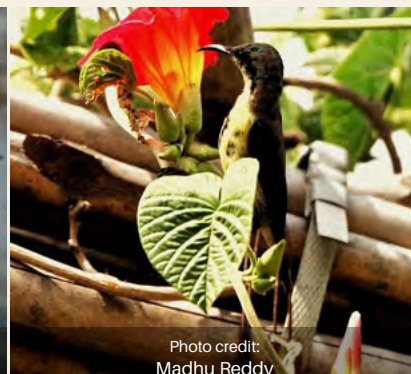
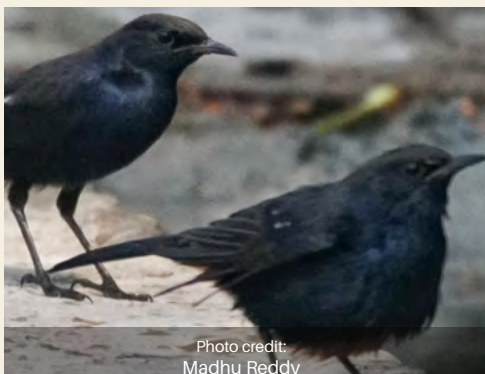
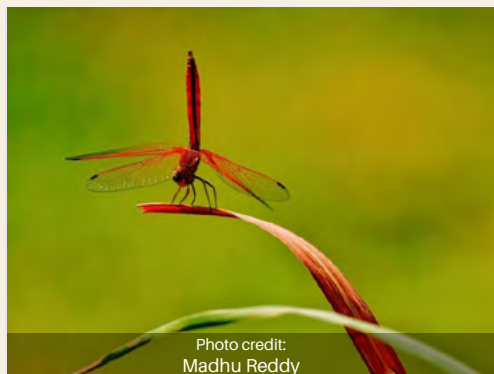
Along with these activities, the farmland is also getting levelled up to commence the cultivation process. To mark the beginning of this process, medicinal plants and seasonal fruits were planted near the boundary area under the guidance of Dr G.Syamasundar Reddy.



The ground leveling work for the bio-pool near the clubhouse is going on in full swing. Farming land is getting readied to begin the cultivation process. Along with these, the east and west facing villas are also shaping up on schedule, inside the community. Take a look at the glimpses from the construction site...



Visitors of Naandi



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Co-Creating Eco-Habitats that Celebrate The Living