

THRIVABLE INSIGHTS FROM THE THRIVABILITY MATTERS WEBINAR

Hi, passionate thrivability enthusiast. We live in unprecedented times. The numbers prove that climate change is here to stay. Social injustices corrupt the very fabric of our society, and misinformation and false narratives clog our devices through mainstream and social media. It's important to have reliable information from people who stand to gain nothing from sharing it with you. A person's agenda defines their motivation. THRIVE's agenda is to assist others to build a thrivable future, while our passionate volunteers walk the talk to deliver an authenticity that is difficult to find elsewhere.

Every month, THRIVE delivers a knowledge-filled [webinar](#), straight to your screens, providing statistics, facts, tips, tricks, and hints on how we can solve the problems our world faces everyday. from new innovations and discoveries, to the actions that people and communities take every day to make our world just a little more thrivable.

Each month, a particular solution is unpacked, disseminated, and investigated, to see how it applies to us and how we can play as a global team, on the playing field of Earth, to reach these goals. It isn't enough for us to sit passively by and let governments and businesses make our decisions for us. After all, their motivation is driven by their agenda. What does that mean for us?

Our aim is to arm you with the knowledge to change from being simply sustainable to terrifically thrivable. Therefore, I'd like to introduce you to Dwarkadas Suresh. He was an esteemed guest for the September 2024 Thrivability Matters Webinar, who spoke to us on SDG 11: Sustainable Cities and Communities. Suresh's focus was ways that homes can be made thrivable, and how he has implemented them in his own home. The thrivable insights that follow are his precious pearls of wisdom that he was generous enough to share with us during the Q&A session that follows every webinar.

INTRODUCING DWARKADAS SURESH



Dwarkadas Suresh, popularly known as Solar Suresh, is an IIM Ahmedabad MBA and IIT Madras engineer. At 80 years young, his unique urban house with seven eco-friendly projects has attracted over 20,000 visitors.

He has delivered 500+ talks worldwide, both online and offline, including two TED Talks. He is a one-man army, propagating sustainability awareness and motivating people to adopt these principles on a pro bono basis, without commercialisation, and all across India.

His focus is on individual houses and the common man.

Q & A

One way that you have supported your community is by collecting green waste from your neighbours and some vegetable sellers. How has the community supported you and your initiatives over the years?

The community has supported me very well, beyond my expectations. Many senior government officials have noticed my efforts, and visited me. Also, the Greater Chennai

Corporation has pasted a sticker in my house entrance stating that this house is a Rain Water Harvesting house.

I am often invited to the internal meetings many government departments to give suggestions - and they have adopted my suggestions.

Over 20,000 people have visited me, and I have addressed over 500 talks - on line and off line - across the world.

I appreciate how you emphasised that the primary purpose of biogas is to manage garbage and rather than merely produce gas. Could you suggest alternatives to garbage management besides biogas?

An alternative to biogas is composting - though a little complex and an open source activity which makes bad smells, etc... But it has its advantages. One can use dry leaves, etc... which cannot be done with biogas. No equipment is required for composting - you only need to dig pits. But it only makes organic manure.

Biogas, makes cooking gas and organic manure, with only one input resource, namely kitchen waste.

Pellets / briquettes can be made with dry leaves and wigs - which is a fuel replacement for coal. This can be used for cooking, and in industrial boilers.



Talking about your rainwater harvesting system, which happens to be your 1st installation few decades ago - could you please share your experience regarding its maintenance over the years?

There is absolutely no daily maintenance – only an upfront pipe installation cost. There are no rotary or other movements, hence there is no need for maintenance.

Also, there is no wear and tear on the filtration materials (which gather pebbles, charcoal, and river sand). So every year before the monsoon season, I take them out, clean them and put them back.

Can you discuss about your upcoming projects or installations that you are planning or have already initiated?

I have developed a solar car, solar scooter and a portable solar charging station – with prototypes ready to be commercialised.

I have taken a trial - which is successful - converting cigarette butts to pellets.

Cigarette butts are not biodegradable, and they are a cellulose acetate - a biomass. Thus, they can be converted to pellets. With my trials successfully completed, they are ready to be commercialised.

I am trying to develop a solar power bank for electric cars, similar to a power bank for mobile charging. The idea is that while driving, if the power drains out and if no charging station is available, one can connect to a power charger connected to a solar panel, and drive the car further. While my concept is ready, I have yet to work out the details.

This gadget will also be very useful for people working in remote locations to generate solar power, and run their gadgets and tools.

This could also be useful for military forces working in difficult areas, and forward territories requiring power.



You have been very active in showcasing the benefits of these installations and spreading the word around. In doing so, what are the common myths/misconceptions that you have come across? In other words why are people reluctant? Is it the lack of technology know-how, money, time, or just mental barriers?

Primarily mental barriers, plus negative perceptions spread by initial failures. For example, there was one case where one or two EV cars got short circuited. The media highlighted these - while hundreds are running – the media never speak about the running vehicles; only the short-circuited ones.

Lack of awareness is another issue - for example, in India, over 10 years ago, two top American companies set up shop and installed roof top solar projects on houses, as well as small and big offices. But overnight, they disappeared - leaving customers in the lurch. While there was no daily maintenance required in the initial stages, issues appeared later on. Also, electricity distribution companies were not prepared for merging into their grids.

Costs were definitely high, and markets were flooded with poor quality Chinese components such as panels and inverters, compounding the misery of customers. While many issues are sorted out now - after a decade, adoption rates are still low. That is where I come into the picture. I am a one man army, creating

awareness and motivating people to install and use these.

There is an unrealistic expectation among customers of solar panels – a return on investment (ROI). Honestly, this is a flawed way of looking at products. People buy cars, air conditioners, washing machines, TVs, apartments, houses, etc... But do they ask about ROI? Is it even possible to calculate ROI with these items? Then why do people only ask about this for rooftop solar panels?

Having said that, the ROI is good for roof top solar - In India, it varies from 15 - 30%. Plus, solar power does not generate pollution, and consumes no fossil fuels, helping create a society that is not reliant on polluting power sources.

Another issue - many houses these days are being converted to apartment complexes.

Technologically, it is possible to install rooftop solar panels, biogas systems, hydroponics etc. but I wouldn't do it myself though...

You said you have installed your solar rooftop power plant in 2012 and later expanded capacity. After more than a decade, could you share insights into the economic benefits and savings you've realised over the years?

I have installed 4 kw of on-grid power and 3 kw of off-grid power with battery backup systems. Generally people install only one type – on-grid or off-grid. I have installed both and automated the system. I used to pay Rs 15,000 (around \$A260) for two months. Now I pay Rs 1500 (around \$A26) for the same amount of time. As a result, I have recovered my investment in 7 years. I installed these systems 15 years ago, so my electricity consumption is virtually free for me now.

Also, in Dec 2006, Cyclone Vardha

swept over Chennai – the entire city was cut off from electricity supply for 5 days. But I had power for all 5 days! I switched all my lights in the evening to showcase the usefulness of rooftop solar with battery backup (and made the neighbours jealous too!). Those 5 days were fun...

And one more thing – I urge everyone to install rooftop solar panels without hesitation. I could keep giving numbers to try and show you why, but at the end of the day, life is not based on logic! I mean, why not install solar panels?



If you found value in this webinar, and loved it as much as we did, please register for our next exciting webinar at thrivabilitymatters.online.

We can't wait to see you there. Keep on thriving!





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