

## 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 Madhukar Swayambhu. He was an esteemed guest for the August 2024 Thrivability Matters Webinar, who spoke to us on SDG 14 & 15: Life Below Water and On Land. Madhukar's focus was on understanding the nature of water in a holistic manner. 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 Madhukar Swayambhu



Along with his colleagues, Madhukar Swayambhu founded Vaidic Srijan LLP - a climate tech startup in India, following a decade of research into Vaidic Sciences on their quest to find a sustainable and holistic solution to global problems.

They've invented several NbS technologies for restoration of soil, water and air through their conjunction points i.e., natural surface waterbodies and wetlands, some of them are popularly known as Cownomics® Technology, Ecolining®, Ecodredging®, EcoDrainR® and Integrated-Symbiotic-Farming®, with others in the making.

The Cownomics® Technology has been awarded by four central ministries of Government of India, as well as various states governments and urban local bodies. They've been invited to give lectures on ecology and environment in various national and international institutes, forums and organisations.

Their technology is being used to rejuvenate billions of litres of water spread over hundreds of acres of water bodies and millions of litres of sewage on a daily basis, spread across the breadth of India, including states like Assam, West Bengal,

Haryana, Punjab, Delhi, Uttar Pradesh, Madhya Pradesh, Gujarat, Chhattisgarh and Telangana.

Their wetlands and water body restoration work has set new standards for providing sustainable and suitable habitation for birds, bees, butterflies and fishes, as well as helping provide protection from flooding and improving the groundwater quality and aquifer recharge curbing air pollution levels. This is all done without diverting or stopping any polluting drains or nallahs.

### Q&A

In your presentation, you have highlighted the uniqueness of Earth's water resources, but isn't it true that water has been discovered on various celestial bodies. including planets and moons in our solar system, asteroids, comets, and even exoplanets orbiting other stars? How does the discovery of water on other planets and celestial bodies impact our responsibility to manage Earth's water resources sustainably? Does it change our perspective on the urgency of addressing water pollution and scarcity issues?

Not just water, life also exists on various other celestial bodies, none of those have been discovered by human beings as of yet. We are just learning about our galaxy and trying to develop resources and technology to explore them. But in doing so, the finite resources that we have on the planet will only be leading us towards that path. Till then, we have only ONE planet.

Although if we use our resources wisely, by virtue of being replenishable through natural processes, the same resources can continue to support us in our growth / development path and help us reach out to those



unexplored boundaries of the universe. Thus, it is imperative to live in harmony with nature, so that the ONE EARTH we have, continues to replenish all the resources and keep fuelling our journey towards development. And for this, it is very important to understand our resources and keep them in healthy conditions, of which Water is the KEY.

It is therefore, a subject of utmost importance and urgency to understand water and waterbodies, and maintain them in a healthy natural state, and live a healthy life towards development and exploration of understanding the nature around us. Not for fear of doomsday, but for the love of nature and knowledge for the entire humanity, for the zeal for life and for the entire biodiversity of our blue planet.



Despite possessing extensive knowledge about the vital importance of water for life on Earth, human activities continue to pollute and degrade this precious resource. To mitigate this issue and ensure sustainable water management globally, what three strategies can we implement to drastically reduce water pollution?

If we have to choose only three, my preferences should be as follows:

 Build the holistic and right knowledge about water, water cycles, water bodies and the whole phenomena called water, instead of

- simply restricting it to H2O, somewhat in line with what we discussed during the webinar.
- 2. Make people aware that you don't have to save water, you just need to save yourself, your families. Because a sick water body will spread sickness around and a healthy water body will spread health around, now you choose what's there for your own benefit and healthy living.
- 3. People don't pollute and degrade resources for fun, they do it because of economic reasons and secondly due to lack of repercussions.

Economics can only be explained when a quantified data is available to them on the effect of contamination of the resources, which can easily be done. In fact, in our projects for Waterbody rejuvenation, we are getting a socio-economic impact assessment done for this purpose only.

As far as consequences are concerned, governments can make laws and enforce them to make an impact for changing the lifestyles of the people.

# While treating water bodies in India, have there been any particular challenges for you?

Getting people to understand the perspective is one of the key challenges. People don't have patience; they always need quick cosmetic solutions, which are often at a superficial level itself. Moreover, people are more concerned about postponing the problem, instead of a cure. I feel it is largely the perception of the people, that is a hindrance.



Second most prevalent issue is economics. Many people think that water bodies could serve the purpose of encroachment, filling and selling the land. But they forget that land and economics – both are just to serve the purpose of life. Without water, life itself won't be possible – it's like cutting the branch on which you are sitting. They don't even realise that water bodies can dwell a sustainable economy for all the people living in the vicinity, but without a water body life itself will become a challenge.

Many Indian cities are facing fast depleting underground water tables, places like Bengaluru, Indore and many more. What kind of solutions should they be looking at?

Restoring the health of water bodies.

People / governments / authorities, should redefine the objectives of the restoration projects. Instead of "physical cleaning and beautification" the projects should focus on "restoring the ecosystem services" or improving the health of water bodies. The "want" from the project has to change.

If they get satisfied with just a "clean" water body, they can never solve the jigsaw puzzle. The groundwater depletion doesn't just happen due to overextraction, it also happens due to a lack of water to recharge the water body. And for maximised natural recharge, keeping the natural resource in good health is the simplest way forward for sustainability.

A water body in an unhealthy condition impacts in multiple ways - like increasing warming, bad air quality, urban flooding, water logging, increase in water, vector and air pollution borne diseases, biodiversity losses and many more. And all these conditions can't be

eradicated with mere "cleaning" of water bodies.

Therefore, restoring the health of the water bodies is imperative, not just from a ground water restoration perspective, but also the overall health of all life forms around them.



According to you, what kind of pollutant is most prevalent in water bodies and difficult to treat? (I am guessing it's plastic)

Most prevalent would-be phosphates, Ammonical or nitrous compounds and sulphates. But difficult to treat are none.

If the water bodies are kept in good health, even heavy metal and minerals are no challenge for them to 'consume & digest'.

It's just a misconception that plastics will take thousands of vears to decompose. In March 2016, scientists in Japan made a startling discovery. They found that some of the bottles at a recycling plant were being broken down by bacteria. The newly discovered bacteria was named Ideonella sakaiensis. So, there are many such natural processes to decompose and digest any man-made molecule on the planet. But then, an excess of anything is good for nothing.



Interfering with nature doesn't help. This doesn't mean that we start growing certain kind of microbes in laboratories to decompose the man-made molecules like plastics. Let nature decide for its course of action. The key is to reduce the intervention with the natural process and undo the harm that we've already caused to the environment.

According to you, why does it take ages to clean rivers like Hindon, Gomti, or lakes in Bengaluru. Apart from - a political will, is it the technology that we lack?

Yes, indeed we lack in the process and the right approach.

We're happy with a mediocre performance. We take a half-hearted approach. We lack holistic research. For example, for years together we've been given the impression that a hydro power dam is an absolutely clean energy source. But do you know, when a Dam like Tehri, get constructed, all the vegetation & villages on the hills, which were designed by nature to be above Water get submerged? And the natural decomposition, then releases greenhouse gases (GHG) within the water, which gets emitted in the air, when it exceeds the holding capacity of the water reservoir? At the end of the day, a dam the size of Tehri will emit more GHG than the entire continent of Australia in a year. That's what I call "lack of holistic research" or a "mediocre study".

If you can't research well, the simple thumb rule is, "don't obstruct the natural flow". Now if we look at the process of cleaning, what are we doing there? Wasting water and cleaning the body. How will it clean water or rejuvenate the river? If you have to clean a country, will you kill all the people and then clean it? Or

will you change the behavioural pattern of the people? A country is formed by the natural resources and the people, and we need to ensure they learn to respect their resources and live in harmony with them. That's the right way, isn't it?



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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