# NOT A SINGLE DRY LEAF SHOULD BE BURNT IN INDIA



A step-by-step guide to creating your Brown Leaf community and prevent dry leaves from burning around you

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# Free Resources for you

We have created some resources especially for you. Here is the link to access those resources, <a href="https://brownleaf.org/brown-leaf-community-resources/">https://brownleaf.org/brown-leaf-community-resources/</a>

Download and use the infographics in this section. Eventually, you will have your content to share with your community. Till then, feel free to use our resources.

Simply acknowledge www.brownleaf.org when you use it. That is all we ask.

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# **About Brown Leaf**

Not a single dry leaf should be burnt in India; That is the vision

The entire Brown Leaf community works towards this vision.

With every tiny leaf that goes back to the soil, we inch towards this vision.

With every person we convince not to burn dry leaves, we inch towards this vision.

That is what Brown Leaf does, the community of determined individuals, saving the environment, leaf by leaf.

What exactly is Brown Leaf?

Simply put, Brown Leaf is the forum for the eco-friendly management of dry leaves.

**MULCH-COMPOST-DONATE** is our 3-fold strategy, the alternative to burning.

Do not worry, we will discuss each in detail in the later chapters.

For the time being, bear with me and believe they are the eco-friendly ways to manage dry leaves.

We will discuss in detail, what is a community, why a community is necessary and how one can build a community around a cause.

Let me start with my story.

# **How Brown Leaf happened**

"There is a really large heap of dry leaves. What is your plan, exactly?"

I was caught off-guard by this question.

Our housekeeping person stood there with a concerned expression.

In the year 2012-13, I completed a Post-graduate diploma in Sustainable Natural Resource Management from a renowned institute like Ecological Society.

It opened my eyes to the world around me. Many things that had never affected me now bothered me. The burning of dry leaves was one of them.

Leaves are biodegradable. Why burn them off when they would eventually decompose? That was my thought.

We have a large tree in the backyard. Like every tree, this is a green respite in the concrete jungle around. It is home to so many birds. It is a pleasure to watch squirrels run about on their branches.

Come winter, and this green dream turns into a brown nightmare.

There are so many leaves.

We were no different. We used to get rid of those dry leaves by burning them.

Now with my new philosophy, I decided to stop this practice in my building premises.

I requested our housekeeping lady not burn dry leaves. I suggested she make a heap of leaves and let it be.

I was so happy. Wow!! I decided something & I implemented it. Great! What was so challenging? I did it.

I got about a month to revel in this bliss till the lady returned with a big question mark.

Her concern was valid. The heap of leaves was quite large by now.

Pretty soon, the society members would have been wondering why this lady was not doing her job? Why the leaves were still there.

Okay, now I saw the problem. Just asking somebody not to burn dry leaves was not sufficient. I was expected to provide an alternative.

What was the alternative? I had no idea whatsoever.

At the same time, I could not bear that large heap of dry leaves going up in the air as the smoke.

Before I proceed with my story, here is a brief background.

I live in Pune city, in the state of Maharashtra in India. Pune is a city with a glorious history. It is called the cultural capital of Maharashtra. It is an education hub, a beautiful city nestled in the hills. It is a green city. A look at the city from any of the surrounding hills is enough to prove this point.

This greenery though has a dark side, the Brown Side.

By mid-October, the leaf fall starts. The roads, the footpaths, society premises, almost every horizontal surface in sight gets covered with layers and layers of dry leaves.

What to do with all these dry leaves? That is the challenge.

The most obvious and convenient solution seems to burn them off. Or pay somebody to take away, who in turn burns it. Basically, the idea is to get rid of dry leaves by any means.

Everybody agrees burning is not a good option. It adds carbon dioxide and carbon monoxide to the environment. Both are greenhouse gases contributing to global warming. Carbon monoxide is particularly hazardous to our health. Smoke is not a very pleasant thing to have, and especially so if you are suffering from asthma.

Then why do people keep burning leaves?

Dry leaves, as the words suggest, are well, dry. They burn down quickly. The large heap gets reduced to a handful of ash in no time.

Convenience takes precedence over the "seemingly ill effects" of burning, which are long-term. Inhaling smoke and gases will not affect us immediately. It takes some

years to show the damage. Hence, there is a temporal difference in cause and effect. And that is why it is not very scary.

I wanted to end this very practice, starting with my own premises.

If not burn, what? That was the burning question, literally!!

In my desperation for an answer, I took to social media.

I drafted a msg, stating that I had many dry leaves and I asked people what all one could do with them.

I did get some responses. One of them particularly interested me.

It was from a lady named Sujata, residing in Pune city itself. She offered to take away every leaf shed by my tree.

Wow!! That is great.

All I had to do was, pack the leaves in gunny bags. I went to my regular grocery shop and got 5 empty gunny bags. The Housekeeping lady and I together transferred the leaves from the heap into the gunny bags.

We had 5 bags ready when Sujata came the next day. She put those bags in the car dicky, thanked me. She brought me packets of home-made spice as a thank you.

And that was all. That large heap in our society premises was gone & there was eager taker for the next batch. Our problem was solved.

But all this was too interesting, just to leave at that.

All these dry leaves were a big headache for me & my society members. Whereas this lady came all the way from the other end of the city and collected those leaves.

Who does that? And why? What exactly she does with those leaves?

Curiosity got better of me & I scheduled time with Sujata for a visit to her place.

What I saw there was Wow!! Simply wow!!

Let me share her entire story.

Sujata belongs to an agricultural family. Fresh vegetables cultivated without any toxic, harmful fertilizers and pesticides is what she dreamt of when she moved to Pune city.

What is the best way to ensure this? Yes, cultivate them yourselves.

In her bungalow society, she owns a plot. She decided to convert that plot into her vegetable farm.

However, there was a challenge.

For many years, that plot lay vacant. The builder when constructing other bungalows in the society had used this plot as a dumping ground. A lot of construction debris had been dumped in that plot over time. There was virtually no soil left.

The challenge before Sujata was to create the much-required organic matter. And that is where dry leaves come in. Sujata utilized dry leaves to make up for the deficiency of organic matter in the plot.

And that is why she had promised me that she would accept every leaf that my tree sheds.

However, looking at the plot, I realized my tree will not be able to satisfy the need of her garden. She needed more dry leaves. Sujata resonated. She agreed, she was constantly on the lookout for dry leaves.

### **Grow Your Own Food**

"Grow your own food" movement has taken root in Pune. More and more people are converting their vacant terraces into family vegetable farms. After discussions with Sujata, I began chatting with these new terrace gardeners.

Buying soil is not financially feasible and is neither ecologically advisable.

Dry leaves make the ideal organic matter, as it is light in weight. It is easy to carry a bag of dry leaves all the way to the terrace as opposed to soil.

All the terrace gardeners shared the same plight, the challenge of getting dry leaves.

Agreed! the dry leaves are just about everywhere for the 6 months of the year. But how can one go to the roadside and pick up the leaves? Of course, some do that. Kudos to them and their care-free attitude.

But the majority of people are not comfortable with that.

Additionally, dry leaves by the roadside contain a whole lot of garbage, like tobacco pouches, chips packets, and whatnot.

So, the challenge here is getting "clean" dry leaves and in a respectful manner.

With these interactions and the problem of dry leaves at my place and everywhere in the city, something started clicking. In the day-to-day busy life, there was some thought, very persistent, nagging me constantly. Though I could not articulate it.

And then something happened. My son fell ill. Do not worry, there was nothing serious, just a viral fever. But he made full use of it to get pampered. For the entire 3 days, I was with him, reading stories to him, watching his favorite cartoon with him.

And that turned out to be mutually beneficial. I got the break, relative calmness to bring forward that nagging thought. That brief hiatus provided me much needed relaxation to tap into my creative side.

There was something out there, quite apparent that somehow, I had missed it entirely in the hustle-bustle of daily life. I played out all the discussions that I had with the gardeners. Being a Mathematics person, I laid out both sides of the equation.

Okay, there are people like me who have a lot of dry leaves and have no idea what to do with them. On the other side, there are people like Sujata who want dry leaves but had difficulty getting them.

Soooooo, it is classic economics. There is supply & there is demand.

Then what is the issue? These two sides are not in touch with each other.

What if I solve this problem? What if I connect these two sides?

How?

Why not create a forum? Why not create a platform to connect these two types of people?

And that is what I did.

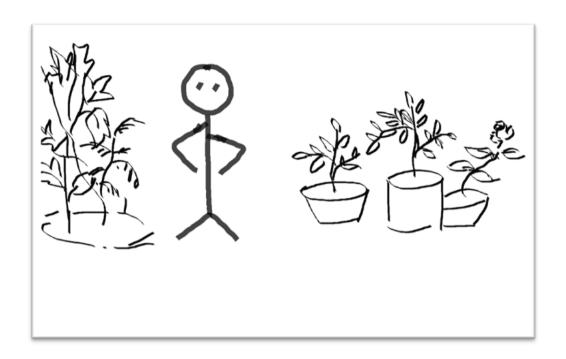
I immediately created a Facebook page, a website using free service. I made some graphics in Microsoft Paint to communicate the concept.

Here is how it goes,

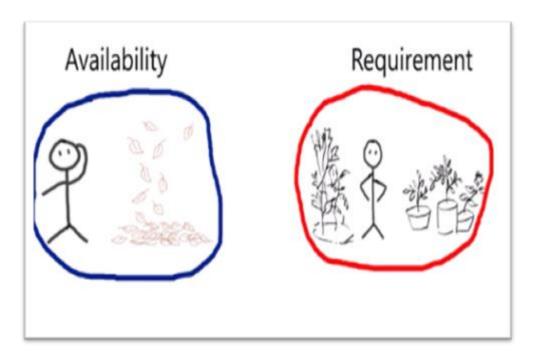
There are people who have dry leaves.



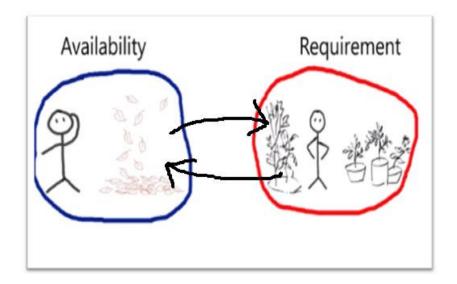
There are people who need dry leaves for their garden



That means, there is availability & there is a requirement. The best part is both are in the same city.



What is needed is a connecting forum to bring together availability and requirement.



I know, the sketches are quite rudimentary. I made use of whatever skills I had. Nonetheless, it served the purpose. People instantly understood the concept.

And the tag line; **Not a single dry leaf should be burnt in the Pune city**. At that time, my focus was limited to my city. The tag line was an instant hit. It created the intended buzz. It caught people's eye.

I shared this message, along with the graphic and website URL, on all WhatsApp groups where I was a member. I received a lot and a lot of replies. That provided further validation to my idea. The number of replies I got was the proof that such a forum was needed.

What started with me and Sujata has now culminated into an incredibly supportive, collaborative community with members from all over India.

# Why this book

I receive queries from people across India. They inquire if we have a Brown Leaf community in their city. I can easily add them to the existing Brown Leaf group. But I am not interested in just making the group bigger.

I want this concept replicated in other cities. Because with my experience I can confidently say it works. Let people create such communities and prevent the burning of dry leaves in their city.

I suggest to the inquirers, "Why don't you start a similar community in your city?"

There is always some hesitation on the other side. It is easier to be part of a community than starting a community on your own. Starting anything alone is scary.

I understand it. Hence, this book. In this book, I have narrated how I started the community, but also the detailed step-by-step process of how one can go about it.

I have shared the challenges I faced, the solutions I found.

I understand, the situation may differ, the response may vary from city to city. However, in my experience, human behavior remains pretty much the same wherever you go. Whatever challenge you face, I am sure you will find a solution or at least some pointers towards it in this book.

I have included some advice, some pitfalls to watch for, some warning for possible problems and challenges. And some helpful resources, tips, and additional activities.

All this is to help you start your community.

Let me tell you one thing. I am an introvert. Going out, talking to people is not exactly my strong point. I have tremendous stage fright. It takes me a lot of time and courage to get on the stage and talk.

I am a technical person. I can sit at my laptop and work for hours. I prefer text messages over the call and email over an actual meeting. If around 5 years back somebody had told me I would be creating and managing a community, I would have laughed.

But here I am today. The point is, if I can do it, anybody could do it.

No matter how introverted you are, No matter how shy you are, No matter how inexperienced you are, YOU CAN START A COMMUNITY!!!

BELIEVE ME!!!

How to use this book

The objective of this guide is to equip you with all the tools and techniques to start your

own Brown Leaf community.

This guide is divided into the following sections,

**Section 1: The Basic Concepts** 

Before we dive into the main topic, a discussion of a few basic concepts is necessary.

Let us call this a theory section. This section will discuss why trees shed leaves, what

happens in a natural landscape, why it is a challenge in the cities, and a brief discussion

about the solutions.

When you start your own community, there will be a lot of queries. People wondering

what leaves can be composted, why they should be doing mulching, what culture to

use for composting etc. etc.

There will be all types of doubts and queries. This section will be handy for you to

answer all the basic questions that come your way.

I suggest not to skip this section. You can fast pace through it, but do not omit it

entirely.

Section 2: Creating Community: Why

This section discusses the power of community. Why building a community around

the cause is necessary, why collaboration is necessary etc.

**Section 3: Creating Community: How** 

Now, here we get into the nitty-gritty of the process. This section will provide you a

roadmap for creating the community. The detailed account of the steps to create the

community, the common challenges, and solutions, how to use technology to help you.

Some additional resources for this section are provided on the website.

**Section 4: Managing Community** 

This section is particularly important. It will supply some very essential tips so that you enjoy the process and do not feel the burden of it.

After the initial excitement, sometimes managing a community can feel like WORK. This section will help you avoid some pain points and will also help you sail through the difficult phases.

I suggest you go through the section now so that you can avoid some mistakes. Do come back to it later, whenever you feel bogged down.

Always remember, if you have any issue to share, would like to talk about your problem and seek support, we are always there.

Our association extends well beyond this book.

Feel free to write to us at <u>pune.brownleaf@gmail.com</u>. We promise we will do our level best to help.

# **Section 1: The Basic Concepts**

## Why trees shed leaves

Let us discuss a bit of botany. Do not worry, just some simple principles, nothing complicated. And we will make it fun.

Water is absorbed by the roots of the plant. It is then distributed to all parts of the plant. This water is thrown out by the plant through the leaves. This process is called transpiration.



Image Courtesy: https://pixabay.com

Leaves have tiny pores on them called stomata. Excess water is let out through these stomata in the form of water vapor. This helps plants cool off.

Opening of stomata allows Carbon Dioxide (CO2) to enter through the leaves. Carbon Dioxide is essential for plants for photosynthesis.

After winter, there is summer. This is the time when it is necessary to save water. for plants (and us as well (a))

How to hold in water, as much as possible? By not letting it go out, right? But if leaves are present, the plant will keep losing water. What could be the solution?

To get rid of the leaves!! Yes, that is what they do. They shed leaves.

Trees that lose ALL their leaves for SOME TIME in a year are called "deciduous" trees. I.e., they are completely leaf-less for that duration.

The word deciduous comes from the Latin word, Decider. It means "to drop", "to fall away".

As opposed to these there are evergreen trees.

You will observe some trees around you are never completely leaf-less like Mango, Jamun, Jackfruit.

They do shed leaves, but not all the leaves at the same time. Hence, they appear green all the time.

And there are semi-deciduous or semi-evergreen trees. In their case, old leaves fall off and new start appearing around the same time.

Every dry leaf that falls to the ground is our focus. It does not matter whether the leaf comes from an evergreen, a semi-evergreen, or a deciduous tree.

But the trees that pose a challenge are the deciduous trees because they lose all their leaves at the same time. So, they generate a lot of leaf litter in a short duration. Our city gets drowned in these heaps and heaps of dry leaves.

Hence, we will discuss more deciduous trees than any other.

However, whatever management techniques we would be discussing later, apply to all the leaves equally.

Remember we follow a strict no-discrimination policy when it comes to leaves (or anything for that matter (a)).

### What happens in the natural landscape?

As we discussed earlier, leaf-fall helps trees conserve water. But that is not all. Leaf-fall also helps the soil and many tiny creatures it shelters. Leaves fall and they remain there throughout the summer.



Fallen leaves form a protective layer over the soil. The sun rays do not directly reach the soil. Hence, the soil can retain moisture because of the fallen leaves, even during harsh summer months.

Have you ever seen the soil by the roadside, the soil that is exposed to the sun 365/24/7? How does it look? It is hard. It is called soil compaction. Soil is compacted due to exposure to the sun. By its color, its look you can guess there is virtually no life left in it.

Contrast it with the soil we find in the forest. It is dark, moist, teaming with life. Thus, the leaf layer helps soil retain moisture.

Various insects too find shelter under these leaves. Leaves fall to the ground and they stay there until the rains arrive.

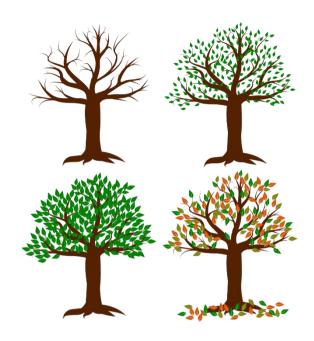


Image Courtesy: https://pixabay.com

With rains, the leaves decompose, the nutrients in them are dissolved in water and returned to the soil.

These nutrients are available to the trees in the soil again, in the form they can absorb.

That is how it works in nature. Let us call it the "soil-to-soil" principle of nature. Everything comes from the soil and everything goes back to the soil. A bit philosophical, huh? But that is how it is.

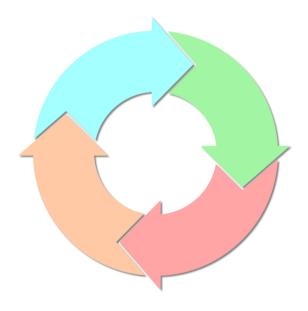


Image Courtesy: https://pixabay.com

And that works.

All the processes in nature are cyclic. The output of one system serves as input to some other system.

That is why there is no waste in nature.

Wait, let us emphasize it. All the processes in nature are cyclic and hence THERE IS NO WASTE IN NATURE.

Why is it a challenge for us in the cities

Since when is it a challenge?

Since when is it a challenge?

What is the solution?

Why burning dry leaves is not such a good idea

Why dry leaves should not be dumped in the trash

If not burn, then what?

Mulch

**Compost** 

**Pit Composting** 

**Pile Composting** 

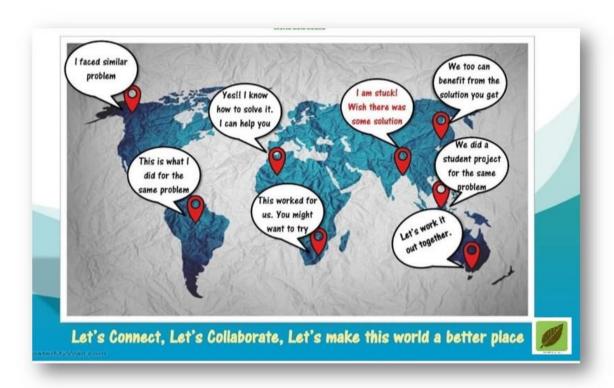
**Enclosure Composting** 

**Donate** 

# **Section 2: Creating Community: Why**

### Why community is necessary

We live in an exceedingly complex world. Every challenge has multiple facets. No single person can provide all the solutions.



### Base Image Courtesy: https://pixabay.com

We need whatever intelligence, whatever creative thinking that is available in the world. 2 brains are better than 1, 3 brains are better than 2, and so on. Let us call it Collective Intelligence.

### Do not be a lone-fighter

You are working for something bigger than yourself

Yes, you can start a community around the cause

# **Section 3: Creating Community: How**

As we discussed in the earlier section, in any city, there are people who have dry leaves and there are people who want dry leaves.

Let us call people with dry leaves, the Leaf-Donors. People who want dry leaves are our Leaf-Takers.

Our philosophy is **MULCH – COMPOST -DONATE**.

MULCH and COMPOST are the recommended alternatives. However, it is not fair to expect a person who is currently burning off dry leaves to get convinced and immediately start composting. It is like expecting a baby to run before he or she walks.

What we are aiming at here is the mindset. The person who considers dry leaves is a waste is to be converted into a person who thinks they are a resource. It is a slow and gradual process. Just like in the case of a baby, there are milestones in changing the mind-set.

Also, when a person is convinced, even then the actual action will take time.

It is like exercising. We all agree we should do it regularly, right? How many of us do it? Very few. Because it involves commitment, it involves efforts. On the other hand, not exercising is more attractive allowing us one more hour of sleep.

Similarly, even when a person agrees burning leaves is wrong, there will be some time till he/she will start mulching or composting. Simply because it requires effort.

Also, that time differs from person to person. Maybe you are kind of a person who takes initiative, who is self-motivated. Once convinced, you act immediately. But that may not be the case with your neighbor. I repeat, mindset change is a slow and gradual process.

Then, what is the solution?

Allow people that time. Yes, start with the simplest of the 3 options. And that is "Donation". The present tendency of people is to get rid of the dry leaves. The Donation option makes that possible.

There is some work involved, of course. But it is less than the first two options. Thus, for people who burn dry leaves, as a starter, suggest them leaf-donation. And then move to mulch and then composting. We will discuss these 2 conversions in detail later.

Once the community is active, many conversions will happen automatically.

Here is an example of how it happened in the Brown Leaf community in Pune.

Once the leaf-exchange started, the leaf-takers would post a photo of their produce. It was their way of saying thank you to the leaf-donor.

There used to be a photo of cabbage, cauliflower, strawberries, and so on. They also shared photos of their beautiful, blossoming gardens.

Dry leaves are useful, was not a theory now. Members got to see the results in the form of vegetables and fruits in the posts.

Around the same time, we began demo visits to leaf-takers' gardens on weekends. These visits received tremendous response. Some had started gardening and needed guidance, some needed more ideas, some were simply curious. All the people got what they wanted at these visits.

The change in the mindset was first visible through the members' language.

"I have a lot of dry leaves. If there is no taker for them by the weekend, I will burn them off"

Yes, that was the language initially, I am not exaggerating.

Now, the language changed. There was no longer a hurry "to get rid of the leaves". Some members coined the term "Brown Gold" for the dry leaves.

Some societies were the leaf-donors. Now they understood the silliness of their actions. They were getting rid of dry leaves that were free. And instead, they were putting in money to buy compost for the society garden.

As the result of this mindset change, we lost many of our Leaf-Donors, because they started using their dry leaves for mulching and composting. Losing is not always a bad thing, what say?

Thus, down the line, an active community will help in changing the mindset, without you needing to put in a lot of effort. Initially though, patience, sometimes a lot of it would be required.

10 steps to create your Brown Leaf community

Step 1: Build the database of leaf-donors and leaf-takers

Step 2: Actively seek out Leaf-Takers

Step 3: Create a culture for your community

Step 4: Create Core Team

**Step 5: Encourage Interaction** 

Step 6: Create a Website and a Facebook page

Step 7: Organize demo-visits

**Step 8: Start a Community Project** 

Step 9: Let the community be more than a leaf-exchange forum

Step 10: Create Lateral Leadership

# **Section 4: Managing Community**

Look out for yourself

Do not let negativity get you

For the first time in history, geography is not the limit, take advantage

Help is always available; all you need to do is ASK

Do not reinvent the wheel, collaborate

Do not Assume, do it and find out

Do not wait for the "Perfect Plan", because such a thing does not exist

Have your definition of success

Focus is the key

There will be some rude remarks

There is no such thing as failure

Identify your strengths and weaknesses

# **Conclusion**

Always remember these verse by Ghalib,

मैं अकेला ही चला था जानिब-ए-मंज़िल मगर

लोग साथ आते गए और कारवाँ बनता गया

Creating a community is easier than you imagine. You start alone. But you will not be alone for long. Your initiative will attract like-minded people.

### ALL THE BEST

Whether you already have a community, whether you are contemplating, I hope this book helped you. We would like to hear from you.

If you have any suggestions, feel free to share. Let us make this guide a comprehensive resource to help others.

If you enjoyed this book, please leave a review!

Thanks!

### **About the Author**

Hello, I am Aditi Deodhar.

I hold a degree in Mathematics and a post-graduate degree in Industrial Mathematics with Computer Applications. I have worked in IT for 6 years.

I completed a Post-graduate diploma in Sustainable Management of Natural Resources & Nature Conservation in the year 2012-2013 from Ecological Society, a prestigious institute in Pune city, founded by eminent ecologist Mr. Prakash Gole. That one year turned out to be a life-altering experience for me. That course truly opened my eyes to the world around me.

With this knowledge in my kitty, I worked with an NGO for 3 years as a software consultant. Here, I could bring together my knowledge of ecology and my technical experience from my years in IT, to develop various tools.

After the course, many things that never bothered me, bugged me now, like the state of the rivers and burning of dry leaves in Pune city. I could no longer pretend everything was fine. I could no longer simply shrug and turn my back.

I was done feeling appalled. I was done feeling helpless. I wanted to find solutions.

This quest led to the founding of an organization along with like-minded people from Ecological Society, Jeevitnadi – Living River Foundation (www.jeevitnadi.org), a people movement for river conservation in 2014.

This same quest led me to Brown Leaf in February 2016.