

RADIO INTERVIEW TRANSCRIPT

Interviewer -

Hello and good evening. Today, we're joined by Palak Samani. She's a student, researcher, and young changemaker who's been doing some really compelling work at the intersection of rural innovation, agriculture, and economic empowerment. She's still in school but already working hands-on with farmers, building tech, and presenting research at national and international platforms.

Palak, welcome.

Palak -

Hi, thank you for having me.

Interviewer -

Let's start from the beginning. Tell us a little about yourself. You've been working closely with farmers, but I understand your own family isn't from an agricultural background. What got you interested in all of this?

Palak -

Yeah, that's true, my family isn't directly involved in farming. But I was born and raised in Sangli, where agriculture is everywhere. I lived there for 15 years before moving to Mumbai in grade 11.

Back in Sangli, every day on the way to school, I used to pass sugarcane fields, watch farmers wake up before sunrise and work in their fields. So even though I wasn't from a farming family, I always felt connected to the people who grow our food. Over time, I realised how little support they actually get - whether it's credit, fair pricing, or even information. That's when I decided: if I'm going to do something meaningful, it has to start here.

Interviewer -

That's very impactful. Palak, I've seen you've done a lot of work around improving access to loans for farmers, especially in Sangli. Can you walk us through what you discovered in that process?

Palak -

Definitely. If you ask most farmers, they'll tell you how difficult it is to deal with big banks — too much paperwork, too many rules, and it just doesn't feel like it's meant for them.

While interning at the Sangli Zilla Madhyavarthi Bank, which distributes the most agricultural loans in the district, I learned about something called Primary Agricultural Credit Societies, or PACS. These are small, village-level institutions built specifically for farmers.

I even explored this on a bigger scale in a research paper where I compared HDI levels and agri policies across BRICS countries and it turns out, countries that treat agriculture as a public good, not just a business, actually support their farmers much better.

They work because they're rooted in the community. Loans are given on time, in sync with the crop cycle. The process is more personal, and you don't need to submit ten different documents. That's why I started meeting farmers directly, I spoke to over 100 across Sangli, and a majority said they preferred PACS over commercial banks for their seasonal needs.

But PACS aren't perfect.

They usually have a fixed loan limit per acre. That limit hasn't changed in nearly 20 years, even though the cost of seeds, fertilizers, and inputs has gone up massively. When I spoke to PACS officials, they themselves admitted this was a problem. Because of this cap, farmers often have to borrow the remaining amount from private moneylenders, who charge interest rates as high as 20 to 25 percent.

That's why I believe for larger loans, like for buying machinery, building storage units, or even personal needs like housing or education, commercial banks are a better long-term solution.

But to access those, you need to build your financial identity. That means: First, get a PAN card, then start filing your income tax returns and lastly, use online payments wherever possible, so there's a digital record of your income

This helps build a CIBIL score, which allows you to get better loans, at better interest rates, in your own name.

And if you're confused about any of this, PAN card, income tax filing, anything, you can come to me. A lot of women farmers already do. I've personally helped file over 200 income tax returns, and I'm always happy to support more.

Interviewer -

That's the perfect breakdown. You've worked closely with women farmers and done a few on ground practices with them about organic farming, what was that about?

Palak -

I've worked closely with over 150 women farmers in Jath, a region where a lot of dragon fruit is grown. When we started, they were selling dragon fruit for just ₹40 a kilo, while the same fruit was being sold in Mumbai for ₹200 apiece. That gap was astonishing.

So we sat together, experimented with organic inputs like jeevamrut and compost, and slowly started shifting plots to chemical-free farming. I helped form self-help groups with these women

and today, through their networks, they're connected to over 5000 women farmers across Sangli and nearby districts.

A lot of them have now moved to organic or low-input farming, especially for high-value crops like vegetables and fruits. I've seen an average income rise of around 250% in families that made the switch and started selling directly to buyers or in local markets under their own label.

To make this even smoother, I helped some of these groups start using platforms like e-Choupal that is a digital mandi where farmers can check prices, find buyers, and avoid middlemen. Many of them had never used a computer or phone for selling crops before, but we did small trainings, helped them understand how to use it, and now it's become part of how they sell.

It doesn't replace local markets completely, but it gives them options and when farmers have options, they get better prices and more respect for their work.

Interviewer -

Incredible! A 250% increase in farmer income can do wonders for their family. You're also building a website called Zerra. Can you explain what inspired that and how it works for farmers on the ground?"

Palak -

After every harvest, you see dry waste piling up on the edges of farms. Sugarcane leaves, cotton stalks, turmeric tops, wheat husk. It gets in the way, so most people just burn it. Sometimes it's small fires. Sometimes the whole field is lit. And for the next three days, there's smoke everywhere - in your nose, your eyes, your house.

But that waste we're burning is valuable. There are factories that use it to make biofuel, biomass briquettes, biodegradable plates, sustainable packaging, even construction material. The only reason most farmers don't sell it is because no one's told them how. That's why I started Zerra.

Zerra is a platform, a simple website, where any farmer can list the agricultural waste they have. You write what kind of crop residue it is, how much, and where it's located. You don't need to wait for a trader or middleman. Buyers from different states can directly see your listing and contact you.

I've worked with over 500 farmers already who've done this - some of them with just 2 acres, some with 15. So far, over 1800 metric tons of waste has been sold through Zerra. That's 2100 acres of farmland that didn't need to be burnt. And across all those transactions, farmers have together earned over ₹26 million just from waste.

But the benefit isn't just income. When you burn residue, you release PM2.5, black carbon, methane, and other dangerous gases. These damage your soil, reduce rainfall, and cause

breathing problems — especially in children. Thanks to the farmers using Zerra, we've already prevented over 4500 metric tons of CO₂ emissions.

So what can you do?

Start sorting your waste. Don't mix soil, plastic, or garbage with it. Keep it dry and stacked. Then visit zerrawaste.com and list it. Even if you're the only one in your village doing it, you can still sell.

Zerra is just a way to turn your leftovers into income, protect your land, and breathe cleaner air at the same time.

Interviewer-

Palak, this is game-changing. I am truly astonished by looking at the use case of this. I heard you've been experimenting with sustainable solutions to reduce the use of plastics in farming. What exactly are you working on in that space?

Palak –

The solution I've been working on is a natural mulch made from clay and turmeric - materials that are cheap and safe. It's shaped like a flat pyramid, designed to be laid between crop rows. It holds moisture in the soil, so you can use less water, and it prevents weeds from growing without the need for chemical sprays. Unlike plastic mulch, which traps heat and kills soil microbes, this one actually protects soil health.

Plastic mulch is used across millions of acres globally, especially in commercial vegetable and fruit farming. But, it damages long-term soil health. The plastic traps heat, which ends up killing beneficial microbes, and after harvest, the sheets are burned or left behind, releasing toxic pollutants like PM2.5, black carbon, and even dioxins into the air. This clay-turmeric mulch. It gives all the benefits but it's biodegradable, microbe-safe, and it even acts as a mild antifungal due to the turmeric. Unlike plastic, it doesn't trap heat aggressively or need to be burned after use.

Farmers who've tried it during our trials noticed their water use dropped by nearly 30%, and the crop roots stayed cooler and healthier, especially in the early summer months. If this is adopted even across 10,000 acres, it could help save over 4 billion litres of water every year. And because the material fully decomposes, it leaves behind no plastic residue and no toxins.

This mulch ties directly into Zerra's larger work: using agri-waste smartly, reducing dependence on chemicals, and helping farmers fight climate stress without adding cost.

Interviewer -

That's amazing, Palak. Thank you so much for joining us today. Before we wrap up is there anything you'd like to say to the farmers or listeners tuning in.

Palak -

Yes, actually. I just want to leave the farmers listening with a few things that I really believe can make a difference.

First - please get your PAN card made and start filing income tax returns. Even if your income is below the taxable limit, just file it. It's important. It shows the banks that you exist on paper, and that you're financially responsible.

Second - if you haven't already, try to start doing some transactions online, even in small amounts. It builds a record that proves you're creditworthy. It might seem small now, but later when you apply for a loan, it can help you get it faster, with better interest rates. If you ever need help with any of this - PAN card, ITR, anything - you can reach out to me. I'll help, no problem.

Also, organic farming is something that can really increase your income in the long run. And please look into platforms and methods that help you remove the middlemen from your supply chain. Even small steps in that direction can mean more money directly in your hands.

You can also check out my website, Zerra. It's a free platform where you can sell your agricultural waste directly to businesses. That waste has value so don't burn it, convert it into income, and help the planet while you're at it.

And lastly, the biodegradable mulch is another great thing to use - it reduces water loss, keeps your nutrients locked in, and protects your soil health. It's five to six times cheaper than plastic mulch, and it's better for your land and our environment.

So yeah, I'm just here to share what I've learned. You all grow our food, and I just want to make sure you get what you deserve. Again, in anything if I can be of any help at all I would be overjoyed.

Thank you.

Interviewer-

Wow, Palak. That was *incredible*. I'm honestly blown away not just by how much you've done at such a young age, but by how practical and rooted your work is. You've made things farmers can actually use. Ideas, tools, platforms and products and with great breadth – from HDI to farming mulch and a brilliant and scalable tech platform.

Thank you so much for being here, for speaking with such clarity and purpose, and most importantly, for being someone who's *actually* trying to make a difference in the lives of the people who feed this country.

Wishing you all the best. And to everyone listening, I really hope you take her advice seriously.

Take care, and goodbye from all of us.