

In this episode we speak to Nidhi Pant, Co-founder of S4S or Science for Society technologies. S4S is a start-up that helps farmers preserve their produce and get a better deal.

A chemical engineer turned farmer turned entrepreneur, Nidhi wants to continue using her background in science and technology to provide scientific solutions to the most challenging problems of rural India.

Nidhi is also the recipient of the Women Transforming India award by Niti Ayog in collaboration with the UN and has also been listed on Forbes 30, under 30 Asia.

Through Word to the W.I.S.E, we will continue to build on our legacy: driving transformative change in pursuit of a safer and more resilient society by inspiring more young women to envision a career in the field of STEM.

Remember, you too can nominate more remarkable women to be part of the show. Or just send in your questions for future guests on the Word to the WISE podcast.

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You can also **read** along as you **listen** to the Word to the WISE host *Shivraj Parshad* in conversation with *Nidhi Pant*:

**Host:** Nidhi Pant thank you for speaking to the Word to the WISE podcast.

**Nidhi Pant:** Thank you. And I'm grateful for this opportunity to the entire team.

**Host:** Now, I know you come from a family of scientists and farmers, but Nidhi if you were to dig deep into your own personal history, what really propelled you to choose a calling so closely linked with science and technology?

**Nidhi Pant:** Born in Uttarakhand to a family of farmers I learned that survival was just not an instinct but something I have to learn very quickly. Born in the lap of the great Himalayas, blessings and misfortunes were something that went hand in hand. Had enough land to till, but there was not enough money that could support this fertile piece of land. And seeing some near one taking their lives due to this brutally unfair situation and having my family suffer this, I definitely saw that what could be the probable solution for this. And both my parents also come from a scientific background and have this inclination that how can we solve these challenges faced by our community and science and technology was only the answer for it, where it could really address the root cause of the problems that we face. And this also led me to pursue my engineering degree and use science and technology to solve some of the most challenging problems.

**Host:** And were those personal incidents that you alluded to, the suicides, the unaffordability of tilling fertile land? Where they the only deciding factor in pursuing science?

**Nidhi Pant:** They were not the only factor, but one of the major factors. But we also see that women and children in our family were fed only rice, no vegetables. It's a very landlocked

region. Transporting goods are a challenge. People are eating food, which is low in nutrition and have to go through these adversities because of logistics challenges. So, all of these together build up. And I definitely wanted to address this and moved them from one stratum to the other, which is really solved the root cause of the problem and not have that Delta ship. So having that Orbit shifting effect. So, all of these together came to play a very big part in my choice of choosing science and technology.

**Host:** So, Nidhi, tell us a bit more about your educational background and what sparked the idea behind S4S technologies.

**Nidhi Pant:** I grew up in Bhabha Atomic Research Centre which is among the most renowned scientists of India and their family. So, science was a very underlying theme in everything that we discussed whether it is school projects. Or any kind of extracurricular activities. And I was very clear that I want to also take it forward and pursue engineering as a, as a subject. And that, that led me to join Institute of chemical technology Mumbai, which is formerly known as UB city it's a government Institute. And I pursued chemical technology. I was very much interested to see how some of these scientific principles could be used in a more practical manner to solve the problem. And that's what led to the birth of Science for Society. which is S4S technologies, where we decided to use, a group of students came together, working in the same lab. My other co-founders are my college seniors. We all came together for the common mission of solving most challenging problems faced by our community, through science and technology. Led to solving the problems of the agriculture industry, the problems faced by our small holder farmers, that markets are distant for them, the perishability is higher, the wastage is high at the farm gate. There are not proper, any sophisticated technology that can help them increase their yield or save on some of their losses. So that's where the idea of science for Society actually started by seeing some of these problems in-person. And also connecting the dots that how can we actually take them all together to solve the problem.

**Host:** And Nidhi for folks who don't understand what S4S technologies does, what exactly does S4S do?

**Nidhi Pant:** S4S transforms, landless women farmers to become micro entrepreneurs by providing them the right combination of technology, market- linkage, and access to finance. We provide our proprietary technology which is a solar based food processing equipment at the farm gate for these women to use it and process their surplus produce for which they don't get the right price in the market. Using the technology they convert it from a fresh produce to a processed food, increasing its shelf life without addition of any preservatives or chemicals. We collect this back and sell these to the large food and beverage industries as food ingredients. So, we help farmers earn an assured additional income and also reduce wastage in the supply chain.

**Host:** And from what one reads about S4S technologies, it has grown exponentially, and it isn't simply just a technology solution anymore to a rural problem. How has it morphed and grown and what keeps you forging ahead?

**Nidhi Pant:** Definitely it's been a combination of things. We, when we initially started the model was very focused on how technology can solve, alone can solve this problem but as we went ahead it evolved into a bit more robust business model where technology was one of the enablers, but not the only solution because we also realized that it was important to monetize

this technology. So how can this work for farmers, for them to get better livelihood options? And that's when we decided that. Okay. What we can do is that we can also provide them market linkage that, okay. they have the produce, which they have processed. Farmers are not marketers. So, can, S4S play, that part of providing them an assured market so that they focused only on processing using the equipment. And that's what we are doing right now. And all of this has been possible through market driven solutions and also having the right access to finance for buying the equipment and accessing the equipment. So definitely technology is at the core of it, but it's also been aided by proper market linkage solution, as well as access to finance.

**Host:** And what are your future plans for S4S technologies?

**Nidhi Pant:** We definitely have proven this model with more than 550 women entrepreneurs now, having these small micro food processing units. Our majority of work is in Maharashtra, Orissa and Uttar Pradesh, and now we are scaling this up very rapidly to reach 3000 women entrepreneurs in next week. So, our goal is first to prevent the food wastage happening at the farm level and also move farmers out of poverty. So, working with these micro entrepreneurs who do not have a steady source of income or and are in poverty are always very debt-ridden to actually come out of poverty, through this, an assured additional income of 6,500 to 10,000 rupees based on how much work they do, how much they process. So, this can actually aide them, have their assured income throughout the year, rather than in bits and pieces, in some months they have work in some months, they don't. So that's how we are scaling S4S to reach more and more micro-entrepreneurs.

**Host:** That's incredible. Nidhi now moving away from S4S technologies. Given your career trajectory, do you believe careers in science and technology provide a level playing field for women in India?

**Nidhi Pant:** No, I definitely feel that men continue to dominate science and technology, and there is no level playing field. And this is also primarily due to the timeline where, when the women are at the peak of their career, that coincides with the time when people think of starting their family. Women also end up being caregivers, not just to children, but also to the entire family. Pay gaps still continue to exist. And more so if you actually see most of the panel discussions or any thoughts that are happening, it's so dominated by men. So, I think we definitely have a lot of work to do to get that parity in place.

**Host:** And Nidhi, what do you think from your perspective must change?

**Nidhi Pant:** I definitely think that it starts with some policy level of intervention. Where these policies are aimed to fix the gender imbalances. These could be flexibility in, at work and working hours. The commitment of leadership at the leadership level towards diversity. Sensitizing male colleagues also about some of their biases that they have and a proper formal mentorship network and a support system that can be offered for women just to feel more confident also while re-entering the work. And then second is to find a very strong support system that how can women have the best support system that they need to tackle all this.

**Host:** You know, you mentioned mentorship, how important then are role models. And if you were to look at your own story, who was your role model and who inspired you.

**Nidhi Pant:** I think mentorship is so important at each stage in your lives? For me at different stages, there were different role models. And I see a mentorship very actively. So, while growing up, starting from Kalpana Chawla to Kiran Mazumdar Shaw both my role models. And as I was growing up, I also started seeking role models in my colleagues and some of the other industry leaders that I interacted with. So, starting from Reshma Anand of HUL foundation to Kiran Pasricha of Ananta centre. I was really having a very strong support system and support from mentors, both inside my own organization and also from the ecosystem, from my board members. So I think role model helps you first find your purpose and helps you strengthen your purpose, so you know that your journey is going to be defined in a particular manner and you feel more confident to pursue it, so it really provides you that, anytime you fail, you have a set of people to fall back on for their guidance support. Secondly, what it helps you is that it helps you to navigate times when you were self-doubting, when you don't know what you're doing is enough, whether you sometimes you are challenged by, by other colleagues. And I think nowadays it's also important to move from a mentor to a sponsorer who's just not mentoring you, but also actively being your cheerleader at each stage, whether it is inside the organization or, or anywhere outside. And I definitely think there could be also a good idea to have a personal advisory board, which is the set of people who know you well, who know that there could be gaps at your end also, so when they give you that direction, they also have a 360 degree view of you, as a person and their advice would be more contextualized.

**Host:** Now Nidhi, you operate at a cusp between climate change and agri-tech. These seem to have become big buzzwords, but as a celebrated woman, entrepreneur yourself, how important is it to remain grounded in everyday realities of what it entails to bring about real change?

**Nidhi Pant:** I think it's very important to not forget that you are married to the problem and not your solution. Just to give you an example in a more scientific manner that you don't want to go there and prove your assumption. Whenever you're building something, you want to test it, you are, you should be more open to be wrong, open to be challenged, by others. And never forget that who are you devising this for? Who are you solving for? If you're solving for women farmers, I cannot deploy a solution, which I feel is the most technologically wow solution, but it also needs to be something which is of use to the end user. And that is the most important part of any product or any solution to translate into something which is usable. For you to reach that scale, it's important to be so closer to the customer, listen to their voice, understand that as a user, what would be their challenges while using that? It is not only that we come and tell them this is the best way to solve it. It needs to come from them, that this is the best solution for me. And there are various ways to and indicators to test it out. So, I definitely feel like for anyone to scale, it's also very important to be humble and very grounded too, to know what your solution does for your end customer.

**Host:** Now Nidhi, you are an advocate for women's leadership and innovation, but for many women listening to this conversation, often it is a question of excelling in science at the educational stage. But somewhere along the line, we've seen many at a crossroad when choosing it as a career. What would your one piece of advice be for them? Not to give up.

**Nidhi Pant:** Don't self-doubt and say that I might not be good enough, or this might just not be valuable enough, or my interventions are not significant enough. Don't compare yourself and have this conversation with yourself. Go out there and experiment and fail. And there is no need to have a self-doubting mind that does not allow you to succeed. So, it's very

important to just experiment and then decide on anything and not self-doubt, that initial stage when, when you're deciding on opportunities.,

**Host:** Nidhi Pant, thank you ever so much to speaking to the Word to the WISE podcast.

**Nidhi Pant:** It's my pleasure. Thank you so much.