

Cooking without smoke

Greenway Grameen's clean stove provides a much healthier way of cooking for women in rural India who use traditional mud stoves, writes Anjali Bhargava

In more ways than one, 31-year-old Neha Juneja stands out. The co-founder and chief executive officer (CEO) of Greenway Grameen is intelligent, unassuming and sensitive, something one rarely finds in one single person.

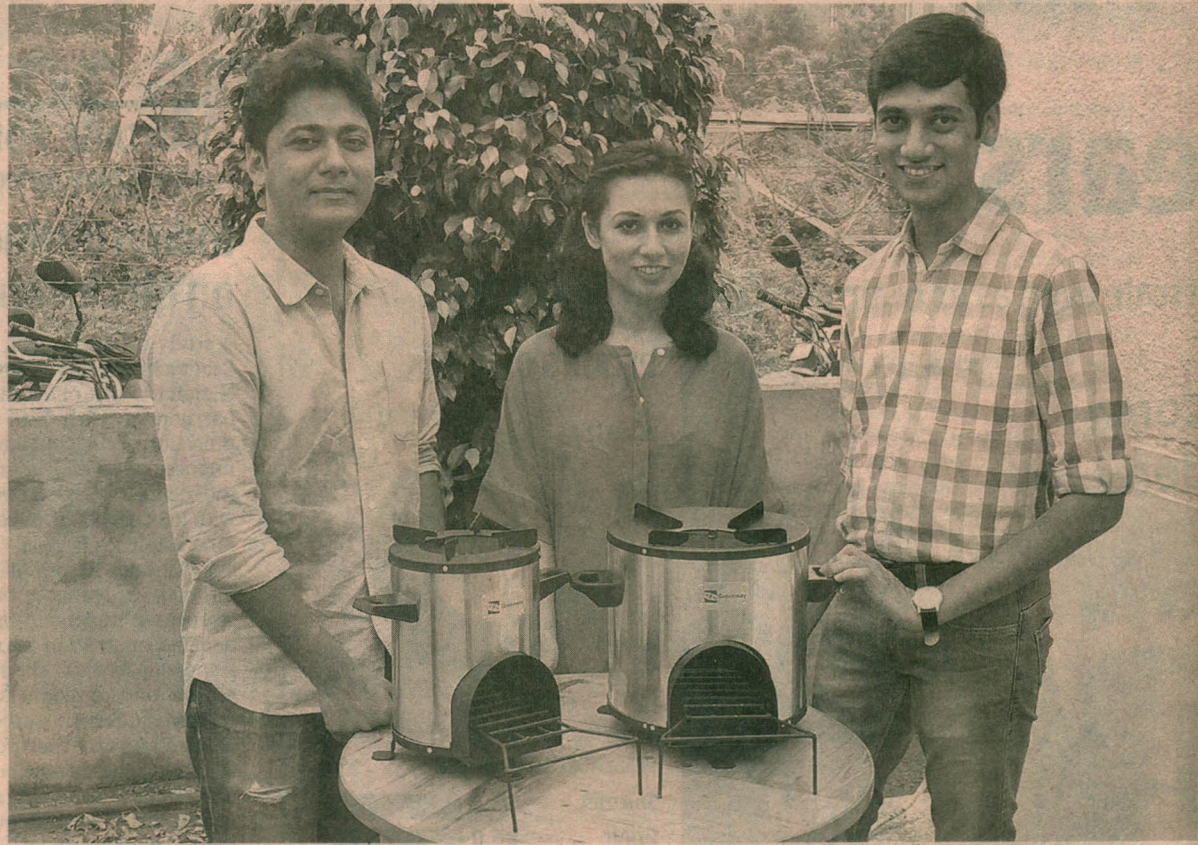
The young entrepreneur graduated in industrial engineering from the Delhi College of Engineering and did an MBA, from the city's Faculty of Management Studies before launching a new business in the financial sector. In 2008, after the financial crisis, her two partners and she got out of the business that did not work out as planned.

But, the trio had some money from the business they exited and were on the lookout for an idea that would solve a larger problem in the country while being profitable at the same time.

Health hazards

It was then that they noticed a problem for its magnitude. In rural and semi-urban areas, women cook primarily on mud stoves (*chulahs*) – a severe health risk and the reason why a number of them in these areas have various respiratory and lung diseases. "An hour spent next to a *chulah* is equal to smoking 20 cigarettes. You do a demographic scan on an average Indian woman in these parts and she will look like a chain smoker for 15 years," says Juneja.

This single health hazard is the cause of



(From left) Ankit Mathur, Neha Juneja and Shoeb Kazi, co founders of Greenway Grameen

a million premature deaths among women. It is also a problem that often escapes the urban psyche since it does not affect women in urban areas who primarily use liquid petroleum gas. The size of the problem presented a massive opportunity.

With this in mind Greenway Grameen conceived, designed and manufactured the Smart Stove in 2012. To do this, for six months, all three partners used a *chulah* themselves in Mumbai to figure what they needed to change.

It helped that all three were engineers with their specific area of expertise. While Juneja is an industrial engineer, Ankit Mathur, 32, is a mechanical engineer from the Delhi College of Engineering (he also has an MBA from Indian Institute of Management, Ahmedabad). The third partner – Shoeb Kazi, 28 – is a chemical engineer from Mumbai University.

Getting it going

Greenway stove models employ a patented

air-induction mechanism that improve combustion and leading to drastically reduced emissions and fuel savings. It also saves on cooking time. Traditional mud stoves are primitive combustion system that convert less than 10 per cent of the energy input into usable output due to incomplete combustion. All forms of solid biomass such as farm waste, dry dung, fire wood, bamboo can be used in both the stoves. A year was spent perfecting various prototypes. The product was finally launched in 2012 and they found the stove flying off the shelves. The problem afflicted around 60 per cent of India so the marketing and sales effort does not need to extend too deep to begin with. "Wherever our consumers aggregate, we get there one way or the other," adds Juneja. In the early years the stoves were produced by vendors with assembly being done in Pune. In early 2014 Greenway set up and started manufacturing the units at their new factory in Vadodara. The company currently produces two stove models (Smart Stove at ₹1,500 and Jumbo Stove at ₹2,500) that vary in size but serve the same target consumers. Since the stoves were launched in

EXPERT TAKE



The benefits of using energy-efficient and smokeless cooking stoves are known. There have been hundreds of designs in the market, and financing and subsidies to make these affordable. However, very few companies have been able to achieve scale and impact. Except Greenway Grameen. By designing a product from sound first

principles, after having spent a lot of time observing customers and understanding their problems, to following an almost endless loop of design-prototype-test-refine, and then investing in building a strong and effective sales and distribution engine, Neha and Ankit at Greenway Grameen have broken away from the pack.

However, they will face many challenges. They need to attract and

retain high quality talent to manage growth. Their product range needs to be widened to address the needs of more consumers. They need to ensure quality is not diluted as they scale. Raising funding to grow and generate returns will remain a big challenge. Finally, they need to rigorously measure impact to ensure their products are actually making a difference.

PR Ganpathy, president, Villgro

FACT BOX

Product: Cooking stoves using air induction technology

USP: Emits lower fumes and uses less fuel and time for cooking

Price: Smart stove : ₹1,500 and Jumbo stove : ₹2,500

Sold so far: 450,000 stoves

Regional spread: Mostly South India and now expanding to other regions

Number of employees: 140

2012, around 450,000 of these have been sold across India via a mix of rural retail, micro-finance/bank partners, community-based organisations and NGOs. Greenway's own flagship payment plan where they enable consumers to take the stove on Day-1 and pay in parts has helped push sales. Juneja says if men were made to cook in India, their sales would triple overnight. Reluctance to spend on the stove is mainly a reflection of how little value is placed on a woman's health and life in rural India. "There is very little empathy for women and even lower value is placed on housework." With a team of 140 people and a newly built modern factory in Vadodara (60 people work at the facility), the company's cumulative revenue has touched ₹50 crore since 2012, making it the largest clean cooking stove company in the country. It has been profitable for all years, barring the first one.

New products

Besides internal funds, the team had an angel investor who contributed ₹20 lakh in its initial phase. Recently, it raised its first round of funding – ₹16 crore – through Acumen and Asha Impact.

The money has helped the company move into new markets. Before raising the funds, it was South India-focused. It has expanded to the western parts of the country, Jammu & Kashmir, Nagaland and other northeastern states. Units are being sold in Nepal and next month, they are going into the Kenyan market through a distributor. The partners say the full scale of the market for clean stoves is around three billion units extends to Africa, southeast Asia and parts of Latin America. For a start, however, India seems a large enough playground. Expansion to other regions is on the cards, as is a new product aimed at rural consumer slated to be rolled out in January 2017.