

Gujarat Man Helps Tribal Women Make Solar Cookers That Cost Just Rs 100!

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At around 9 AM, just before leaving for work, she washes a cup of [daal](#), mixes in pre-cut vegetables, and drops the concoction inside a cooker. Doing the same with the rice, she leaves to work in the fields. A few hours later, at lunchtime, when she returns home, the food is cooked and ready to eat. This is not a magical—or hypothetical—situation. This is the reality of hundreds of women in rural parts of Gujarat, who, thanks to Alzubair Saiyed, the senior manager at the Gujarat Grassroots Innovation Augmentation Network, and his solar cooker campaign, have embraced a new way of cooking. But there's more. As opposed to conventional solar cookers worth thousands of rupees, the cost of this one ranges from Rs 50 to Rs 100! Owing to this, Alzubair and his product have been able to solve a crucial problem in the rural socio-economic fabric—dependence on traditional fuels. “Half of the world's population is still dependent on fuels generated from wood or cow dung for cooking, and every year, 160 lakh hectares of forests are destroyed to obtain wood. This not only harms the environment but is also a root cause for various severe health issues for those continuously exposed to its fumes. In this case, it is the women,” says Alzubair, whose visits to villages across Gujarat revealed how women would have to travel long distances to obtain wood for cooking. [Living The Solar Way](#)



Alzubair used to be an Assistant Professor in an engineering institute, and his aim was to find an effective solution for the problems induced due to the unhealthy methods of cooking practised in various Indian villages. After a lot of research, the most straightforward yet most efficient solution to the problem turned out to be a solar cooker. “Solar cookers are truly a boon—they use renewable energy, reduce pollution and are all-round beneficial for the environment,” he says. Alzubair quit his job to devote his skills to this project. But there was a practical hurdle in implementing its use in rural areas of the country. There are broadly two types of solar cookers available in the Indian market—a box type and a parabola. While the former costs between Rs 2000 to Rs 2500 with government subsidies, the latter costs between Rs 7,000 to Rs 11,000. “A family in these tribal areas earns Rs 5000-6000 per month and affording the available solar cookers worth Rs 2000 and more is not a possibility. So, I decided to create an economical alternative, which they won't necessarily have to buy, but can even make on their own,” says Alzubair, who then made a viable model of Sharon Clausson's Copenhagen Solar Cooker and began to help tribal women make a similar version of their own using affordable materials. Solar



Cooking Campaign

Realising its potential for positive change, Alzubair and Virendra began the Solar Cooking Campaign, which involved training rural and tribal women, men, youth and students to make their own solar cookers. “We began the campaign on October 18, 2016 with the help of the Copenhagen Solar Cooker. I interacted with Sharon and with her encouragement, I made a simpler version of the same and began to teach others to do the same through workshops in various parts of the state,” he says. Under this campaign, the duo don't just educate the masses about solar power but also motivate them to make the best use of sun's energy. So

far, they have travelled to more than 100 villages in Gujarat, including Panchmahal, Narmada, Jamnagar, and Jetpur with their solar model, changing hundreds of lives on the way. “We have organised the Solar Cooker Workshop in more than 100 villages till date. In the last two years, our initiative has reached many parts of Maharashtra and Karnataka as well,” says Alzubair. While many rural families have already begun using solar cookers successfully, on the other, since 2017, Alzubair and his former student, Virendra Dhakhda, have been working on a new design for a prototype that can be easily made at home, with the help of paper, cardboard or waste materials.



Talking about this version, he explains, “This solar cooker will be light and foldable and long-lasting. You will need cardboard, aluminium foil, four clothespins and a lanyard. The utensils used should either be of steel or aluminium, and you would need to paint their exterior with black so that they absorb maximum heat. Most of these things are usually available at home, and if not, the maximum expenditure would not go beyond Rs 100. You can easily cook dal, rice, vegetables, dhokla, handwa, cake etc.” He adds that his work is largely inspired by the Copenhagen Solar Cooker. This easy-to-use model will have a lifespan of approximately 1.5 years, and is expected to take around 2-3 hours to cook food for 5-6 people, and can be operated by anyone, including children, to cook food. However, the model it is inspired by comes with its share of limitations, and Alzubair is trying to overcome them. “The cooker will be powered by solar energy, so the cooking process can only happen during the day. Also, it takes slightly longer to cook food during winters or on cloudy days. But we are constantly working to improve the model, and despite these limitations, it is undoubtedly a blessing for many women in the rural parts of India,” he says.



Owing to his relentless efforts, Alzubair was awarded the ‘UN V-Award 2018’ on the occasion of International Volunteer Day. His work also received international appreciation—he was selected as Solar Angel (Envoy) at the Gandhi Global Solar Journey (GGSJ). We salute this dedication and extend our support to this brilliant initiative! If you wish to do the same and extend your support to the cause, please feel free to connect with Alzubair at 9558350506. First published by [The Better India](#) on 4 Sep. 2020