



Lighting the path forward

Pratibha Pai, Co-Founder and Director of NGO Chirag Rural Development Fund (CRDF) tells MAITHILI CHAKRAVARTHY about enabling simple dreams across villages through simple basics



One of the UN's first sustainable development goals is to "end poverty in all its forms everywhere". Its 2030 Agenda states that ending poverty in its many manifestations, which includes extreme poverty is a great test the world faces today and is indispensable for progress.

In India, NGOs like the Chirag Rural Development Fund (CRDF) through initiatives like Project Chirag are only helping further that goal so that "the country can take its rightful place in the world and be a global leader". Project Chirag started out as a student project at Mumbai's IIT College in 2016, and the work continues to this day under the aegis of a full-fledged NGO - the CRDF. It has lit up hundreds of villages across seven Indian states focusing on Maharashtra and Karnataka and has been helped in starting rural and agricultural schemes.

On January 11, the project, supported by local NGO Diganta through Pratibha Pai, started a new initiative having lit up its 60th village - the Bahyachapada village in the Moha-da block of Sidda-makera, Dharwad and Co-Founder of CRDF Pratibha Pai talks excitedly about the landmark moment and the sense of satisfaction her work has brought her. Today, the homes, schools, streets and (neighbourhoods) in several dark villages across the country have come to be lit based with the magic of solar power, in large part due to the path paved by organisations like PAI's.

Pai tells us that what is precious is that more have found their smiles back. With light, the women can continue their embroidery work till much later and the villages also feel more secure about stepping out after dark. Lights have helped the sense of community in the villages grow as people now gather on streets after dark to have conversations. Schedules no longer revolve around the setting sun and people now have the freedom to go about their chores till much later too. Most importantly, incomes have grown as the villages can now move and work with fewer restrictions.

In Maharashtra Bahyachapada, along with providing light to the houses, the NGO has also installed a solar powered lift irrigation system which brings water by tap to the houses and helps irrigate the 30 acres of farmland in the area. The new system of irrigation makes it possible for the farmers to cultivate their lands

all year round. Pai says that the farmers will now be able to grow flowers and vegetables like jaggery and ladyfinger on their lands, which in turn will help raise their disposable incomes.

"Mokhada has perennial rivers flowing around it. However, the villagers had to walk 2 to 3 kilometres everyday on mountainous terrain to get water. Bahyachapada is a hamlet of about 50 houses. There are also a few shops (small houses) in the area. The farmers have moved away from their lands which is mainly forest area, during the monsoons when farming takes place and stay there through the entire season. Up until now farming has taken place mainly in the monsoons because irrigation during other times of the year has been difficult. The water they needed was from a river and they didn't know how to pull it up. Last Thursday we installed a lift irrigation pump in the river which will be powered by solar power from a mini 10 kilowatt grid which we also installed at the same time. It will lift 100,000 litres of water every day to the highest point on the mountain, and store it in large tanks. Governmental funds will be used to take it down to the fields. Twenty-three farmers have signed up for the scheme and will now benefit from it," explains Pai.

She adds, "So far they were only engaging in subsistence farming in the rainy season, with paddy as the only crop. There are plans to sell the mango grown during other times of the year in the markets of Mumbai, while the other seasonal produce like ladyfinger and brinjal that they will grow will take them beyond subsistence farming. The minute we combined our solar powered lighting projects with solar powered irrigation projects, we realised we were creating a multiple shift. Lives would now change dramatically".

In other villages, the NGO employing other unique methods to grow villagers' livelihoods and their savings, seeks to install a solar powered "portable machine" (a leaf plate and bowl machine) which will use fallen forest leaves to make the leaf stems which can then be used as temples in the vicinity - another business opportunity for the villagers.

Drawing inspiration from Coimbatore-based agent of social change Arunachalam Muruganantham, the man who invented inexpensive sanitary pad making mini machines, CRDF is also flirting with the idea of supplying eco-friendly and solar powered sanitary pad machines to cater to the needs of the adolescents

in residential schools in tribal areas and the secondary hospitals in some villages. The Chirag Rural Development Fund began its work in tribal areas across the country last year. It is working to improve the lives of the people across the country and paved the way for sustainable solutions to sustainable problems that grow the city residents never have to face. In doing so, they have lit the torch to reveal a new path for those who have, for several generations, lived in absolute poverty. For years, kerosene lamps were the only source of light across tribal areas. By providing solar and LED lights through solar power, the NGO has helped villages do away with the use of kerosene lamps and kerosene which is not only inferior in its capacity to light up a room but also has disastrous effects on local health. The continued use of the



large also proves to be a learning threat to poor social safety and security. Chronic eye and lung problems are the result of the kerosene lamps, and apart from that the spilling over of kerosene can cause deadly fires in their thatched roofs and bamboo huts.

"The kerosene economy was not working for them. That is where we intervened. We said we will give you some form of renewable energy. We couldn't use wind power because that would prove very costly solar was a better option, and we are now moving to the grid form where we are putting up a big grid which powers houses and other dreams like mobile phones. Earlier the villagers had to walk 6-8 kilometres to get the electricity charged. They also had to shell out a sum of Rs. 10-12 every time they wanted to charge their phones. Now the newly installed light units in their houses have a mobile charging device that's free for them and we give the villagers different jobs depending on the kind of phones they have. That's a bit of money saved for them."

That's a bit of satisfaction in income for Pai and her colleagues. She shows us a picture of a smiling girl at a village her NGO lit up saying, "This is the first time she is seeing light, look at the smile on her face."

