Ganesh
11 year old dhol player from Bridge School-Singla

You play exceptional dhol. What do you want to be when you grow up?
I want to be either a dhol player or a police officer.

From whom do you learn to play the dhol?
Are you inspired by someone?
I learnt to play the dhol from my father. He is a stage performer. He plays in orchestras and also at weddings.

Do you feel while playing the dhol in front of guests or classmates?
I feel very happy when I play the dhol. I feel some new energy passing through me if I play the dhol after studies and I feel rejuvenated. I love to see our guests and classmates dance to the beats of the dhol.

What kind of beats do you play?
I play bhangra beats, wedding beats and also some beats for which only the girls and women are supposed to dance.

You are a part of the Raag initiative. What are you learning here except the dhol?
like Raag classes very much. We are allowed to draw and paint whatever we want. Our gurus have also taught us how to make puppets from papers and clothes. I want to make puppets and use them to narrate stories in my community.

The entire campus of 16 buildings is powered by the rooftop solar panels - about 600 of them - which generate 50 kW of electricity per day to power the fans, lights, water heaters and the community kitchen.

Solar panels have been set up by the college in surrounding areas too, so that people of the nearby villages get the benefits of electricity without having to pay costly bills.

There are many people in the developing and underdeveloped countries, still living in darkness. The reasons could be remoteness of location or inability of the government to supply electricity - in underdeveloped countries like Gambia, Sierra Leone, Zanzibar and even in places like Ladakh, Manipur, Bhutan and our own country. More than 60 years have passed since independence but electricity has not been able to reach so many villages in the country. During every election, parties promise to totally electrify India but it has not happened yet. However, in all these places there is one thing in common, i.e. availability of plenty of solar energy and so Barefoot College decided to train these people to set up their own solar energy systems, thus reducing the dependence on the government. And so far the result has been wonderful, with solar “Mamas” (that’s how solar engineers are called in the community) from 73 countries being trained till date and solar electric benefitters paid for by 600 people. Barefoot has set a target of delivering solar lighting to 1 million people by 2019, through the Solar Mamas initiative.

The External Affairs ministry supports the Solar Mamas initiative of Barefoot College-Singla and shortlisted Lucy Napanoi, an illiterate grandmother from the Masai community of Kenya. Lucy was dishonoured and rejected in her own community and left by her husband due to traditions after she lost a finger in an accident. From then on, she raised her children on her own and did all sorts of jobs to pay their school fees and give them a proper education. She struggled a lot for her children and after years of hard labour, her efforts bore fruit. Her children entered college and taught her to speak English so that she could earn more in the market by selling beads to tourists. And when Barefoot approached their village with the offer of training a grandmother to be a solar engineer in India, she came to Tilonia and now after completing her training she has returned to her village to become the first Solar Mama in her region and is responsible for installing, operating and maintaining solar electricity systems in her region, thus spreading light among her community.

Sita Devi, Solar Cooker Engineer

How did the idea of setting up a solar cooker workshop come up?
Around 15 years back, a German engineer, Wolfgang Seppler visited our campus, just like you are here today and he presented the idea of a solar cooker manufacturing team to Bunkerji. So, he trained a few of our ladies to make the solar cookers and then returned. After that the ladies perfected their skill through trial and error and subsequently some other ladies also learnt it from them.

How many people are working in your section?
At present there are 3 of us. All of us have just the minimum education to read and write.

Please tell us the different stages of manufacturing a solar cooker and the time taken.
We manufacture parabolic solar cookers which are 2.5 sq m in size and weigh 130 kg. It takes nearly a month to make a solar cooker. We need to do bending, cutting and welding of the materials like the metal rings, glass pieces and the cooker. Measurements have to be precise otherwise the cooker won’t work.

A part of this initiative is to train others.

What can be cooked and how long does it take?
You can make fried items, boiled and steamed items. Within 10 minutes, 1 litre of water can come to boil. Within an hour, 20 litres of water can be boiled, and even large quantities can be cooked. Parathas and chapattis can be made quite easily.

How does one purchase a solar cooker?
For purchasing, you must contact the Women Barefoot Solar Cooker Society. We give training to those who want to purchase and if the place is nearby, our team will go and install it. The price is 13,000. Installation and transport have to be paid for separately.

Mostly there are no maintenance issues but if any issues arise, our team repairs the solar cooker.

When asked why it’s mostly women who are trained by Barefoot to become solar engineers and not men, Bunkerjoy says that men are mobile and they want a certificate. They want to migrate to other places in search of well-paid jobs. But that’s not the case with women, especially grandmothers. They won’t migrate and will remain with their community to take care of the solar energy systems and also train others.