

Caring for Mother Earth, Bolivia

Providing solar ovens in the Amazon



Esther Guarayuco's family was one of the first to receive a solar oven in the Bolivian Amazon. The Caring for Mother Earth project has now delivered 260 ovens to 20 communities in the region.

Caring for Mother Earth

In 2015, Christian Aid embarked on a 3-year project with the Church of Scotland Guild to provide solar ovens to indigenous communities in the Bolivian Amazon.

Caring for Mother Earth Bolivia provided solar ovens to four communities: Bella Altura and Capaina, north of La Paz, and Bermeo and Nueva Betania in Beni.

Year one - the pilot

For twenty years, a non-profit organisation called Inti Illimani has been building and delivering solar ovens to families in the Bolivian Altiplano where the sun radiation is strong. When Christian Aid proposed that they trial the solar ovens in the Amazon rain forest, the company rose to the challenge. They ran a variety of tests to ensure that the solar ovens would work despite the potential difficulties thrown up by the forest canopy, the humidity and cloud cover. Minor changes were made to the screws to counteract the humidity and wheels were added to the ovens, turning them into portable cookers.

The families involved in the pilot phase of the project quickly incorporated the ovens into their daily routines. While they are simple to use, the impact of the ovens became immediately

apparent. They enable people to eat well; prevent trees being cut down for fire wood thus allowing communities to be resilient and to stay on their land despite the impact of climate change; and free up women to participate more fully in community life and decision making.

Within the first year of the project, 70% of families were using their oven more than 3 times a week. The average wood and gas consumption dropped by around 35%. Families saw a 50% drop in the amount of time that they spend cooking food.

In year one, the families who took part in the pilot phase focused on getting to know the ovens, experimenting with different cooking methods and recording recipes and tips that could then be passed on to others.

At the end of the pilot phase in June 2016, Christian Aid distributed 56 ovens: one to every family in two of the target communities.

Year 2

In 2016, Sally Foster-Fulton, Head of Christian Aid Scotland visited Malawi. While she was there she spoke about Caring for Mother Earth Bolivia with the Malawian government minister for energy and mining. He was so impressed with the project that staff from Christian Aid Malawi then travelled to Bolivia to meet the communities and find out more about the solar ovens. We are hoping to submit an application to the Scottish Government to begin similar work with communities in Malawi.

Year 3

In the summer of 2017, residents of the Beni community celebrated the success of the solar oven project with a huge Bake Off event. People brought soups, biscuits, jams, cakes and other treats cooked in their solar oven. Emma Donlan, Christian Aid's Bolivia Country Manager, said that the project had gone so well that they have been overwhelmed by the project's success as it continues to evolve. 'Every community I visit now asks for solar ovens!'

A recipe book, inspired by the Bake Off, has been produced and will be distributed to new families receiving ovens.

Trish's visit to Bolivia

Trish Gentry, Christian Aid supporter and Guild member, saw first-hand the rich resources of the rainforest and the vital need for the solar ovens.

'The forest provides most of the people's needs, being larder, pharmacy, firewood and building materials. But dry firewood is a problem in the wet season and takes time to gather. Needing only the sun's radiation, the solar ovens save time and energy which frees up the women to be able to do other things.

I would like to think that what this project has done for the families and especially the children, is that their lives will be improved and that they will be able to stay here and really

enjoy their life here as they would like to live it.'

Life-changing results

At the start of the Caring for Mother Earth project, we knew that solar ovens worked well in the highlands of Bolivia where there is little cloud cover. But we didn't know whether they could also work in the much wetter, more humid environment of the Bolivian Amazon.

As communities struggled to find dry firewood, the hope was that a solar oven would accomplish two things: enable people to be resilient to climate change and eat well regardless of the weather; and free women up from the long hours of collecting firewood and cooking over open fires, so that they can participate more fully in the decision-making life of the community. Almost immediately, the ovens created possibilities for transforming lives. What if women didn't need to get up at the crack of dawn to get firewood? What if women didn't need to spend hours cooking over an open stove? As Emma Donlan, Head of Bolivia, explained, 'It wasn't that the ovens cooked food that was exciting, it was the time it gave back to women that was exciting'.

To date, we've given out many more ovens than we had originally thought possible: 260 ovens to 20 communities. Thanks to your hard work and generosity, this project hasn't only transformed lives. Its success has attracted other funders to ensure that even more families will benefit.

Inherit the Earth

Inspired by the solar ovens, Christian Aid has developed a photography exhibition, featuring stories from the heart of the Bolivian Amazon. The exhibition explains how legacy gifts make possible many projects like this one.

If you would be interested in the exhibition visiting your church or community café, please contact Jo Dallas on 0141 2416139 or email jdallas@christian-aid.org



Roxana's story

'When I was a little girl I barely learned to read or write. Sending girls to school was not considered to be important at all in my community. But I was clever and brave, I had lots of ideas in my head. But when I wanted to express them and participate in decision making processes in my community nobody ever listened to me, or to any of the women for that matter. We were invisible! I decided to become a representative in the women's organisation in my indigenous territory. Things did not change quickly and there is still a long way to go, we really have to fight for our voices to be heard.

We knew that our dependence on firewood for cooking was leading to deforestation and health problems caused by hours spent cooking over a smoky fire pit. The solar ovens have meant a big change in our everyday lives and in the way we cook food. But I have encouraged and led my friends to embrace the change because I can see the positive effects on the environment, on our families' health, on our environment and I see how much time the solar ovens save. Women use this time that has been freed up to get involved in other activities outside their homes, such as the leadership courses.

As our voices have got stronger we have been able to express our needs and contribute new ideas and perspectives to improve the lives of our families and to protect the forests which are an extended part of our home.'